

EUROPEAN CIVIL AVIATION CONFERENCE

ECAC

ECAC / JAA PROGRAMME FOR SAFETY ASSESSMENT OF FOREIGN AIRCRAFT - SAFA -

REPORT 2003



**ECAC / JAA PROGRAMME
FOR SAFETY ASSESSMENT OF FOREIGN AIRCRAFT**

SAFA REPORT

(01 JANUARY 2003 TO 31 DECEMBER 2003)

TABLE OF CONTENTS

	PAGE
1. INTRODUCTION	1
2. MAIN FEATURES OF THE SAFA PROGRAMME	2
3. TRAINING OF INSPECTORS	3
4. CENTRAL SAFA DATABASE	4
5. DATA COLLECTION	5
6. AREAS OF INSPECTION	7
7. MAIN RESULTS OF THE SAFA INSPECTIONS	9
7.1 INSPECTION FINDINGS IN GENERAL	9
7.2 INSPECTION FINDINGS AND THEIR CATEGORIES	10
7.3 INSPECTION FINDINGS ON A REGIONAL BASIS	11
7.4 INSPECTION FINDINGS RELATED TO CHECKLIST ITEMS	13
7.5 THE TOP 3 SIGNIFICANT AND MAJOR INSPECTION FINDINGS RELATED TO CHECKLIST ITEMS	13
8. ACTION TAKEN	17
8.1 GENERAL	17
8.2 INTEGRATION OF THE PROGRAMME IN THE OVERALL AVIATION SAFETY CHAIN	18
8.3 FUTURE ACTION	18
8.4 CO-OPERATION WITH ICAO	19
8.5 CO-OPERATION WITH THE EUROPEAN UNION	19
APPENDIX A LIST OF STATES OF INSPECTED OPERATORS	20
APPENDIX B AIRCRAFT TYPES INSPECTED	22
APPENDIX C OPERATORS INSPECTED	25
APPENDIX D RESULTS OF INSPECTIONS PER INSPECTION ITEM	34
APPENDIX E RESULTS OF INSPECTIONS PER INSPECTION ITEM PER YEAR	36
APPENDIX F RESULTS OF INSPECTIONS PER INSPECTION ITEM	41

1. INTRODUCTION

Safety has always been of prime importance to the development of international air transport. During the last ten years, globalisation has had an impact on civil aviation as well as on many other areas. This has increased the need for each State to be able to maintain confidence in the safety oversight provided by other States.

- In 1996, the International Civil Aviation Organisation (ICAO), a specialised agency of the United Nations, began a voluntary programme of assessments of national aviation authorities. As a result of decisions taken during the 32nd Session of the Assembly in 1998, the ICAO Programme has been operating on a universal, transparent and mandatory basis. In the framework of the *Universal Safety Oversight Audit Programme*, all ICAO Contracting States had been audited before the end of 2001, their ability to conform to the safety-related Standards and Recommended Practices of the Organisation had been assessed, and the main conclusions made available to other Contracting States. In 2001, the 33rd Session of the Assembly decided to continue the Programme and to carry out follow-up audits in the period 2002-2004.
- Also in 1996, ECAC launched its own SAFA (*Safety Assessment of Foreign Aircraft*) Programme, as a complement to the ICAO audits. The SAFA Programme is based on a bottom-up approach, taking as its starting point ramp inspections of aircraft landing in ECAC States, and progressing through further steps to the involvement of States of Registry or States of Operator when circumstances so require.
- The linkage between the above two programmes was framed through a Memorandum of Understanding between ICAO and ECAC, signed in November 1997 at presidential level, to achieve mutual support and co-operation. The MoU was subsequently amended, in May 1999, to take into account the evolution of the ICAO Programme towards its universal application.
- The European Union participates actively in the SAFA Programme through membership in the SAFA Steering Committee and the provision of funding made available to the JAA by the European Commission.

2. MAIN FEATURES OF THE SAFA PROGRAMME

The main features of the SAFA Programme are:

- Its application by all 41 ECAC Member States¹, including the sharing of information through an on-line centralised database.
- Its bottom-up approach: the Programme is built around ramp inspections of aircraft.
- Its non-discriminatory nature — SAFA applies equally to aircraft from ECAC and non-ECAC States.
- Its close relationship with the ICAO Universal Safety Oversight Audit Programme.

The principles of the Programme are simple: in each ECAC State, foreign aircraft (ECAC or non-ECAC) can be subject to a ramp inspection, chiefly concerned with the aircraft documents and manuals, flight crew licenses, the apparent condition of the aircraft and the presence and condition of mandatory cabin safety equipment. The references for these inspections are contained in the Standards of ICAO Annexes 1 (Personnel Licensing), 6 (Operations of Aircraft) and 8 (Airworthiness of Aircraft).

These checks are carried out following a procedure which is common to all ECAC Member States and are then the subject of reports which also follow a common format. In the case of significant irregularities, the operator and the appropriate Aviation Authority are contacted in order to arrive at corrective measures to be taken not only with regard to the aircraft inspected but also with regard to other aircraft which could be concerned in the case of an irregularity which is of a generic nature. All data from the reports, as well as supplementary information (for example a list of actions undertaken and finalised following an inspection) are centralised in a computerised database set up by the Joint Aviation Authorities (JAA), the Associated Body of ECAC.

It is to be noted that SAFA ramp inspections are by their nature on-the-spot assessments which cannot replace safety oversight responsibilities of the State of Registry. Ramp inspections serve as pointers, but they are not intended to, and they cannot, guarantee the airworthiness of a particular aircraft.

This report presents the results of the Programme for the year 2003 in terms of inspections and findings.

¹ Albania, Armenia, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Moldova, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, Ukraine, United Kingdom.

3. TRAINING OF INSPECTORS

In the year 2003, the training of “qualified SAFA inspectors” from ECAC Member States continued. Two training sessions were held which were attended by more than 60 inspectors. One session was organised at the ECAC/ICAO training institute (EASTI) in Brussels and one session in Warsaw/Poland. For 2004, additional courses will be organised. Since the start of the training programme, some 320 inspectors from 34 ECAC States have participated in the training courses.

These courses deal with the application and practical usage of the SAFA procedures. In addition, practical experience is shared among participants. The training provides a positive contribution to a common approach among ECAC States to the way inspections are performed.

With the training sessions having a more theoretical approach, a new initiative has been launched to stimulate the exchange of practical experience. The “Inspectors Exchange Programme” aims to provide on-the-job training by allowing inspectors of one ECAC State to visit their colleagues in another ECAC State and to closely witness their working methods. Such participation in the day-to-day operation of a ramp inspection scheme enables individual inspectors to increase their practical knowledge and skills. A side benefit is the potential the programme offers to progress towards uniform application of SAFA inspection and reporting procedures.

4. CENTRAL SAFA DATABASE

In 2000, the SAFA database became fully operational. In 2002, a major adaptation was implemented enhancing its “user-friendliness” and data retrieval function.

The database contains the reports of the ramp inspections performed by ECAC States. Although it is managed and maintained by the JAA, the inclusion of reports in the database remains a responsibility of the individual National Aviation Authorities (NAA) of ECAC Member States.

Data contained in the database is considered confidential in the sense that it is only shared with other ECAC Member States and is not available to the general public. The database can be accessed by the National Aviation Authorities of ECAC Member States via a secure private communication network.

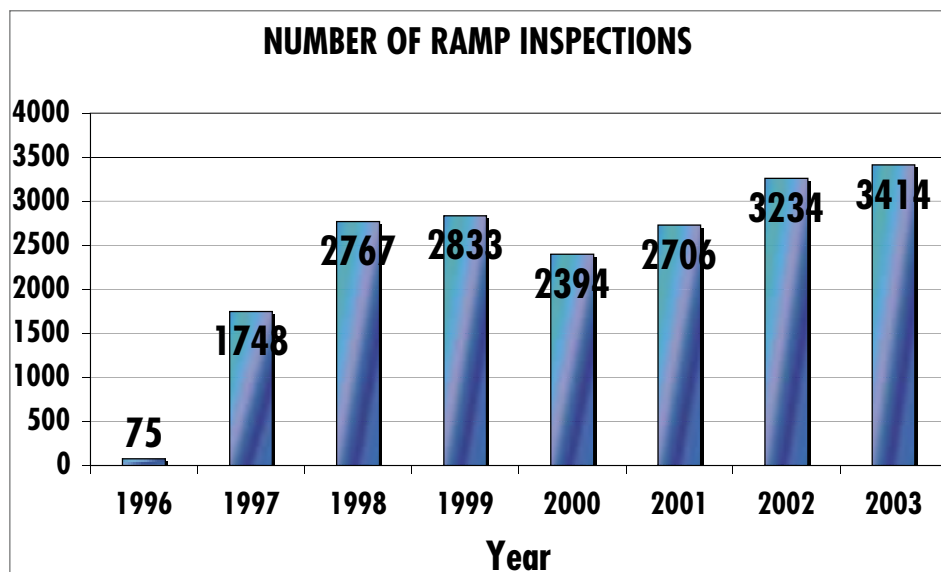
Some ECAC National Aviation Authorities have yet to get access to the database. However, all active States have secured their access. Therefore, the number of reports contained in the database reflects the actual number of inspections carried out.

This annual report is based upon the reports that are contained in the database.

5. DATA COLLECTION

In general, ECAC Member States are dedicated to the SAFA Programme. 34 of them have participated — in one form or the other — since 1996, when the Programme was launched. More than 19,000 inspections have been carried out and recorded in the database since the start of the Programme.

During the year 2003, 27 States performed some 3,414 inspections.



When comparing the total number of ramp inspections performed in 2003 (3,414 inspections) to the number performed in the previous year 2002 (3,234 inspections), the following conclusions can be drawn:

- The number of ECAC States which performed SAFA ramp checks has increased to 27 States.
- Four States, which were not active in 2002, or in the years before, started to perform ramp inspections in 2003. Two other States which were active in 2002 temporarily discontinued their inspection activities in 2003.
- Since the year 2000, a steady increase in the total number of inspections can be observed. This may be explained by the fact that the total number of States participating in the Programme has increased. In addition, in most of the States the total number of inspections performed per State tends to increase over the years.

The table below indicates Member States which carried out inspections and, for comparison purposes, those which did so in earlier years.

MEMBER STATE	1996	1997	1998	1999	2000	2001	2002	2003
ALBANIA								
ARMENIA								
AUSTRIA			√					
AZERBAIJAN								
BELGIUM	√	√	√	√	√	√	√	√
BOSNIA AND HERZEGOVINA								
BULGARIA		√						
CROATIA							√	√
CYPRUS						√		
CZECH REPUBLIC		√	√	√	√	√	√	√
DENMARK	√	√	√	√	√	√	√	√
ESTONIA				√	√	√	√	√
FINLAND		√	√	√	√	√	√	√
FRANCE	√	√	√	√	√	√	√	√
GERMANY	√	√	√	√	√	√	√	√
GREECE			√			√	√	√
HUNGARY						√	√	√
ICELAND		√			√	√	√	√
IRELAND	√	√	√	√	√	√	√	√
ITALY	√	√						
LATVIA			√	√	√	√		√
LITHUANIA			√				√	√
LUXEMBOURG		√		√	√		√	
MALTA								√
MOLDOVA					√			√
MONACO		√						
NETHERLANDS	√	√	√	√	√	√	√	√
NORWAY			√	√	√	√	√	√
POLAND		√	√	√	√	√	√	√
PORTUGAL		√	√	√	√	√		√
ROMANIA			√	√	√	√	√	√
SERBIA AND MONTENEGRO								
SLOVAKIA			√	√	√	√	√	
SLOVENIA			√	√		√	√	√
SPAIN			√	√	√	√	√	√
SWEDEN		√	√	√	√	√	√	√
SWITZERLAND		√	√		√	√	√	√
THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA (FYROM)						√	√	√
TURKEY	√	√	√	√				
UKRAINE								
UNITED KINGDOM	√	√	√	√	√	√	√	√

6. AREAS OF INSPECTION

In nearly all States, the number of flights by foreign operators is far greater than the inspection capability. This means that only spot checks are possible. This can be done at random or it might be decided to focus the inspection according to certain criteria, as listed below. In case Member States decide to focus their inspections, this decision is based on national policies and priorities and also, when relevant, on recommendations, endorsed by the ECAC Directors General of Civil Aviation. These recommendations are based on an analysis of the SAFA database and take into account Member States' national priorities.

There are five areas on which the inspections can be focused:

- Specific State of Operator (checking operators from a particular State)
- Specific aircraft type
- Specific nature of operations (scheduled, non-scheduled, cargo, etc.)
- Specific foreign operator; or
- Specific aircraft identified by its individual registration mark.

Appendices A to C list the States of Operator, aircraft types and operators inspected in 2003. They highlight the wide coverage of the SAFA Programme and, more importantly, its non-discriminatory application.

The smooth operation of the Programme can also be illustrated by the table below, which aggregates the information in the Appendices and provides an overview of activities.

OVERVIEW OF THE SAFA PROGRAMME IN THE YEAR 2003

INSPECTIONS	3,414 INSPECTIONS...
OPERATOR	...ON 623 DIFFERENT FOREIGN OPERATORS...
STATE OF OPERATOR	...FROM 131 STATES...
AIRCRAFT TYPE	...OPERATING 172 DIFFERENT (SUB)TYPES OF AIRCRAFT

Because of the non-discriminatory character of the SAFA Programme, aircraft both from ECAC and non-ECAC States are inspected. The following table shows the results (3 years moving average):

	ECAC	non-ECAC
1996	51%	49%
1997	57%	43%
1998	57%	43%
1999	58%	42%
2000	61%	39%
2001	64%	36%
2002	66%	34%
2003	63%	37%
Average	60%	40%

Over the years, the percentage of inspections on aircraft from ECAC operators has steadily increased. Several reasons have contributed to this fact. The number of ECAC Member States has grown, resulting in an increased volume of "ECAC traffic". In recent years, many new operators emerged in ECAC Member States and may have attracted more attention on their operations.

In the early years of the SAFA Programme, a significant percentage of the inspections were directed at CIS-built aircraft (Antonov, Ilyushin, Tupolev, Yakovlev) operated by non-ECAC operators. However, because of noise regulations, the population of these CIS-built aircraft is gradually decreasing.

In conclusion, it can be stated that the distribution of SAFA inspections reflects the fact that the vast majority of all flights within ECAC Member States are carried out by ECAC operators.

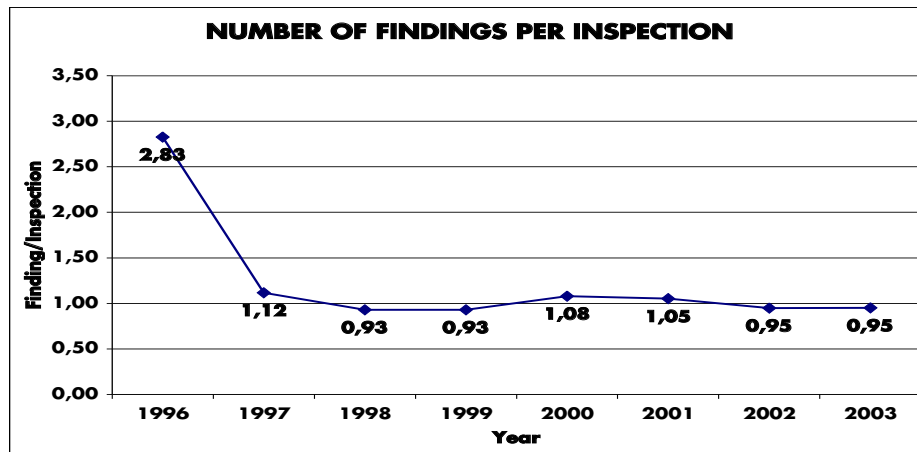
7. MAIN RESULTS OF THE SAFA INSPECTIONS

7.1 INSPECTION FINDINGS IN GENERAL

A first starting point regarding the findings, which are deviations from ICAO Standards, is the quantitative approach. This compares the total number of findings (F) to the total number of inspections (I) and the inspected items (II).

During the inspection, a checklist is used. It comprises a total of 54 different inspection items. In the majority of cases, not all items are checked during an inspection because the time between the arrival of the aircraft and its departure is not sufficient to perform a complete inspection. Therefore, the relationship between the total number of findings and the total number of inspected items might give a better understanding. The results are presented in the table below.

	YEAR								TOTAL 1996- 2003
	1996	1997	1998	1999	2000	2001	2002	2003	
TOTAL INSPECTIONS (I)	75	1,748	2,767	2,833	2,394	2,706	3,234	3,414	19,171
TOTAL INSPECTED ITEMS (II)	1,675	31,413	88,400	95,524	80,454	82,935	93,681	100,014	574,096
TOTAL FINDINGS (F)	212	1,951	2,573	2,631	2,587	2,851	3,064	3,242	19,111
FINDINGS / INSPECTIONS (F/I)	2.83	1.12	0.93	0.93	1.08	1.05	0.95	0.95	1.00
FINDINGS / INSPECTED ITEMS (F/II)	0.13	0.06	0.03	0.03	0.03	0.03	0.03	0.03	0.03



With the exception of the early years, the range of the ratio findings / inspections (F/I) varies slightly between 0.93 and 1.08. This means that on average during each inspection between 0.93 and 1.08 findings were established.

Related to an individual item inspected, this means that for every 100 items inspected on average three findings were established (F/II is 0.03).

A majority of States concentrated their inspections on those operators which had findings in the past so that an increased ratio F/I could be expected. But this seems to be offset by the fact that:

- The number of inspections performed annually is still increasing.
- Over the years, the focus of the inspections has shifted to operators holding Air Operator Certificates (AOC's) issued by ECAC States (1996: 51% to 2003: 63%).

7.2 INSPECTION FINDINGS AND THEIR CATEGORIES

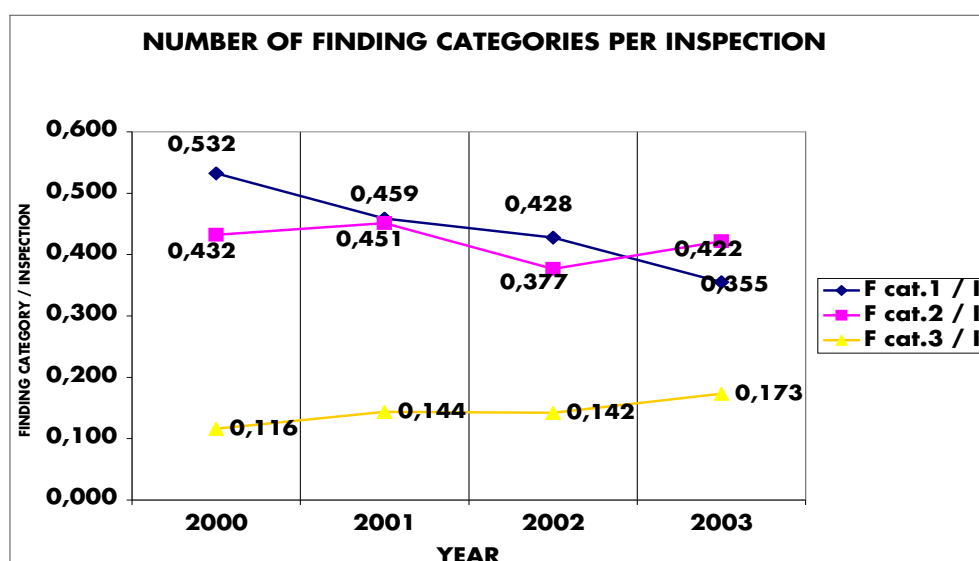
Not only the absolute number of inspection findings needs to be considered, but also their "seriousness". To this end, three categories of findings have been defined. A "Category 1" finding is called a minor finding, "Category 2" is a significant finding and "Category 3" a major finding. The terms "minor", "significant" and "major" relate to the level of deviation from the ICAO Standard. The finding categories are specified in the SAFA procedures and are neither left to the discretion nor to the judgement of individual inspectors.

The prime purpose of categorising the findings is to classify the compliance with a standard and the seriousness of non-compliance with this standard. It needs to be explained that non-compliance with a standard may not necessarily mean an immediate threat to the safety of the aircraft and its occupants. A typical example: an aircraft piloted by a person who does not carry a pilot license with him or her, is considered a Category 3 (major) finding and a serious deviation from the standard. In case this person has by mistake left his/her license at home but is properly qualified to pilot the aircraft, it is evident that there is no direct influence on safety. Nevertheless, a Category 3 finding is always of major concern for the National Aviation Authorities involved.

In 2000, the database was adapted and the categories of findings have been recorded since. The results are presented in the table below.

YEAR	No. INSPECTIONS (I)	No. FINDINGS (F)				RATIO OF FINDINGS (Fcat./I)			
		CAT. 1 (MINOR)	CAT. 2 (SIGNIFICANT)	CAT. 3 (MAJOR)	TOTAL	Fcat. 1/I	Fcat. 2/I	Fcat. 3/I	F TOTAL/I
2000	2,394	1,274	1,035	278	2,587	0.532	0.432	0.116	1.080
2001	2,706	1,258	1,221	389	2,868	0.459	0.451	0.144	1.054
2002	3,234	1,384	1,219	461	3,064	0.428	0.377	0.142	0.947
2003	3,414	1,212	1,439	591	3,242	0.355	0.422	0.173	0.950
TOTAL	11,748	5,128	4,914	1,719	11,761	0.435	0.418	0.146	1.000

The graph below presents the finding categories related to the number of inspections.



From the graph it may be concluded that the number of Category 1 and Category 2 findings related to the number of inspections shows a downward trend. The number of Category 3 findings related to the number of inspections remains more or less stable. General conclusions:

- The overall number of findings per inspection is decreasing.
- The contribution of Category 1 and Category 2 findings is decreasing.
- The contribution of Category 3 findings remains the same.

7.3 INSPECTION FINDINGS ON A REGIONAL BASIS

In order to identify any regional differences, the finding categories were related to operators from different regions of the world and grouped according to ICAO Regional Offices. The results for the year 2003 are presented in the table below.

ICAO REGION	No. OF STATES INSPECTED	No. OF OPERATORS INSPECTED	No. OF LANDINGS AT ECAC AIRPORTS	INSPECTIONS (I)	No. OF FINDINGS (F)				RATIO OF FINDINGS (Fcat./I)			
					CAT. 1 (MINOR)	CAT. 2 (SIGNIFICANT)	CAT. 3 (MAJOR)	TOTAL	F CAT.1/I	F CAT.2/I	F CAT.3/I	F TOTAL/I
APAC ¹	20	30	34,281	100	36	54	31	121	0.36	0.54	0.31	1.21
ESAF ²	11	15	10,842	51	30	29	24	83	0.59	0.57	0.47	1.63
EUR/ NAT ³	53	449	2,424,031	2,708	914	1,120	365	2,399	0.34	0.41	0.14	0.89
MID ⁴	18	41	69,936	294	139	157	77	373	0.47	0.53	0.26	1.26
NACC ⁵	10	54	190,805	177	43	26	29	98	0.24	0.15	0.16	0.55
SAM ⁶	6	14	8,281	36	6	4	4	14	0.17	0.11	0.11	0.39
WACAF ⁷	13	20	6,908	48	46	48	60	154	0.96	1.00	1.25	3.21
TOTAL	131	623	2,745,084	3,414	1,214	1,438	590	3,242	0.36	0.42	0.17	0.95

Operators from States belonging to the SAM, NACC and EUR/NAT ICAO Region have fewer findings per inspection than average.

Operators from States belonging to the APAC, MID, ESAF and WACAF ICAO Region have more findings per inspection than average.

Chapter 6 indicates that in 2003 (3 years moving average) 63% of all inspections performed concerned ECAC operators. The remaining 37% have been inspections of aircraft operated by non-ECAC carriers.

In the table below, the findings and categories are presented.

REGION	No. OF STATES INSPECTED	No. OF OPERATORS INSPECTED	INSPECTIONS (I)	No. OF FINDINGS (F)				RATIO OF FINDINGS (Fcat./I)			
				CAT. 1 (MINOR)	CAT. 2 (SIGNIFICANT)	CAT. 3 (MAJOR)	TOTAL	F CAT.1/I	F CAT.2/I	F CAT.3/I	F TOTAL/I
ECAC STATES	41	369	2,275	690	717	267	1,674	0.30	0.32	0.12	0.74
NON-ECAC STATES	90	254	1,139	524	721	323	1,568	0.46	0.63	0.28	1.37
TOTAL	131	623	3,414	1,214	1,438	590	3,242	0.36	0.42	0.17	0.95

¹ APAC-Asian and Pacific ICAO Region: Australia, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China (incl. Hong Kong and Macao), Cook Islands, Democratic People's Republic of Korea, Fiji, India, Indonesia, Japan, Kiribati, Lao People's Democratic Republic, Malaysia, Maldives, Marshal Islands, Micronesia, Mongolia, Myanmar, Nauru, Nepal, New Zealand, Palau, Papua New Guinea, Philippines, Republic of Korea, Samoa, Singapore, Solomon Islands, Sri Lanka, Thailand, Tonga, Vanuatu, Viet Nam.

² ESAF-Eastern and Southern African ICAO Region: Angola, Botswana, Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Seychelles, Somalia, South Africa, Swaziland, Uganda, United Republic of Tanzania, Zambia, Zimbabwe.

³ EUR/NAT-European and North Atlantic ICAO Region: Albania, Algeria, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Monaco, Morocco, Netherlands (incl. Netherlands Antilles), Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Marino, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, The former Yugoslav Republic of Macedonia, Tunisia, Turkey, Turkmenistan, Ukraine, United Kingdom (incl. Cayman Islands, Bermuda), Uzbekistan.

⁴ MID-Middle East ICAO Region: Afghanistan, Bahrain, Cyprus, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Oman, Pakistan, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, United Arab Emirates, Yemen.

⁵ NACC-Northern American, Central American and Caribbean ICAO Region: Antigua and Barbuda, Bahamas, Barbados, Belize, Canada, Costa Rica, Cuba, Dominican Republic, El Salvador, Grenada, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, United States of America.

⁶ SAM-South American ICAO Region: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Panama, Paraguay, Peru, Suriname, Uruguay, Venezuela.

⁷ WACAF-Western and Central African ICAO Region: Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone, Togo.

For each category of findings, the relative number of findings is higher for operators from non-ECAC States than from ECAC States.

7.4 INSPECTION FINDINGS RELATED TO CHECKLIST ITEMS

Appendix D provides the results regarding each individual inspection item (III) which has been inspected. It indicates the number of times that a particular inspection item was checked, the number of findings and the ratio F/III. **Appendix E** tabulates and graphically presents the values of the latter ratio for the years 2000 to 2003. **Appendix F** provides the detailed breakdown of findings for the year 2003 by categories.

7.5 THE TOP 3 SIGNIFICANT AND MAJOR INSPECTION FINDINGS RELATED TO CHECKLIST ITEMS

The inspection checklist consists of four major parts. Part A concerns items to be inspected in the flight deck of the aircraft. Part B of the checklist concerns items to be checked in the (passenger) cabin, and mainly consists of safety equipment. Part C relates to the general technical condition of the aircraft which needs to be verified during a walk around check. Part D checklist items concern the cargo compartment of the aircraft and the cargo carried.

Any general findings not covered by Parts A, B, C or D can be administered under Part E (general) of the checklist.

When considering the findings established during a SAFA inspection, Category 2 (significant) and Category 3 (major) findings require the highest attention when it comes to the need for rectification. For each part of the checklist, the top 3 of Category 2 and 3 findings related to the number of inspections are given in the table below.

A – INSPECTION ITEMS CONCERNING FLIGHT DECK

No.	INSPECTION ITEM	DESCRIPTION	No. INSPECTIONS (III)	FINDINGS (F)					CAT. 2 & 3/III
				CAT. 1	CAT. 2	CAT. 3	CAT. 2 & 3	TOTAL	
1	FLIGHT DECK / GENERAL	EQUIPMENT	1,738	12	92	10	102	114	0.0587
2	FLIGHT DECK / DOCUMENTATION	RADIO NAVIGATION CHARTS	1,737	34	74	14	88	122	0.0507
3	FLIGHT DECK / DOCUMENTATION	MINIMUM EQUIPMENT LIST (MEL)	1,609	29	62	7	69	98	0.0429

A.1 EQUIPMENT

ICAO Annex 6 requires aircraft to be equipped with a Ground Proximity Warning System (GPWS). This system issues a warning to the flight crew if the aircraft comes too close to the ground or terrain below. Some CIS-built aircraft types (Tupolev, Ilyushin, Antonov, Yakovlev) either have no such system installed

or they have a 3-channel SSOS system installed, which does not fully meet the ICAO Standard.

A.2 RADIO NAVIGATION CHARTS

Navigation systems are applied to determine the position of the aircraft relative to the earth, and for this purpose Navigation Charts and Navigation Databases are used. As the data to be included in the Navigation Charts and Databases could change from time to time, it is required that they be regularly updated. Out-of-date Navigation Charts and expired GPS (Global Positioning System) and FMS (Flight Management System) Navigation Databases were the most common findings.

A.3 MINIMUM EQUIPMENT LIST (MEL)

The MEL specifies the circumstances under which an aircraft may be operated in spite of certain equipment being inoperative. The MEL is established by the aircraft operator and approved by the responsible State of Operator. The majority of the findings concerned the lack of evidence of approval of the MEL, the MEL not being available or being out of date.

B – INSPECTION ITEMS CONCERNING PASSENGER CABIN

No.	INSPECTION ITEM	DESCRIPTION	No. INSPECTIONS(III)	FINDINGS (F)					Cat. 2 & 3/III
				CAT. 1	CAT. 2	CAT. 3	CAT. 2 & 3	TOTAL	
1	SAFETY / CABIN	EMERGENCY EXIT, LIGHTING AND MARKING, TORCHES	1,447	39	73	23	96	135	0.0663
2	SAFETY / CABIN	ACCESS TO EMERGENCY EXITS	1,522	18	37	28	65	83	0.0427
3	SAFETY / CABIN	FIRST AID KIT / EMERGENCY MEDICAL KIT	1,442	28	37	8	45	73	0.0312

B.1 EMERGENCY EXITS, LIGHTING AND MARKING, TORCHES

The findings mainly concerned emergency exit lights which were not functioning properly, torches (flashlights) which were not available, in poor condition or not available in sufficient quantity, and non-installation or inadequately functioning of floor proximity (emergency) escape path marking systems. These systems indicate the location of the emergency exits. They are important especially when there is a fire or smoke in the passenger cabin or when the normal cabin lights are not functioning.

B.2 ACCESS TO EMERGENCY EXITS

Access to emergency exits must always be clear of obstacles. In case of an emergency, the path to the emergency exits and doors should be clear, allowing a rapid evacuation of the aircraft. Findings established were obstruction of access by catering boxes, luggage and cargo. Another frequent finding, especially on CIS-built aircraft, was the fact that the seats in front of the emergency exits can fold forward and in case of an emergency may block the path to the exit.

B.3 FIRST AID KIT / EMERGENCY MEDICAL KIT

This concerns the ICAO requirement that an aircraft should carry a first aid kit. General non-compliances were: first aid kit not secured or not properly stowed, no proper identification of the position where the first aid kit is stowed, and kit not at the indicated position.

C – INSPECTION ITEMS CONCERNING GENERAL CONDITION OF AIRCRAFT

No.	INSPECTION ITEM	DESCRIPTION	No. INSPECTIONS (III)	FINDINGS (F)					CAT. 2 & 3/III
				CAT. 1	CAT. 2	CAT. 3	CAT. 2 & 3	TOTAL	
1	AIRCRAFT CONDITION	WHEELS, TYRES AND BRAKES	2,737	62	79	21	100	162	0.0365
2	AIRCRAFT CONDITION	GENERAL EXTERNAL CONDITION	2,970	182	81	9	90	272	0.0303
3	AIRCRAFT CONDITION	LEAKAGE	2,375	65	46	13	59	124	0.0248

C.1 WHEELS, TYRES AND BRAKES

Wheels, tyres and brakes need to be in proper condition. Reported findings were tyres worn beyond limits, leakage of hydraulic fluid in landing gear areas, brakes worn beyond limits.

C.2 GENERAL EXTERNAL CONDITION

This concerns findings established during the visual inspection of the exterior of the aircraft. Findings included missing rivets, corrosion, dents in leading edges (wing / engine), missing static dischargers, missing registration marks, paint peeling off, etc.

C.3 LEAKAGE

On an aircraft one will find many systems containing various sorts of liquids (oil, fuel, water, hydraulic fluid etc.). Hydraulic, fuel and water leakages were reported. Areas concerned were the toilet service panel, wings, flaps and slats, engines, Auxiliary Power Unit, landing gear, etc.

D – INSPECTION ITEMS CONCERNING CARGO COMPARTMENT

No.	INSPECTION ITEM	DESCRIPTION	No. INSPECTIONS (III)	FINDINGS (F)					CAT. 2 & 3/III
				CAT. 1	CAT. 2	CAT. 3	CAT. 2 & 3	TOTAL	
1	CARGO	SAFETY OF CARGO ON BOARD	904	22	34	103	137	159	0.1515
2	CARGO	DANGEROUS GOODS	292	4	10	18	28	32	0.0959
3	CARGO	GENERAL CONDITION OF CARGO COMPARTMENT	1,546	28	30	19	49	77	0.0317

D.1 SAFETY OF CARGO ON BOARD

In several cases it was established that cargo in the cargo holds was not properly secured. Heavy items (such as spare wheels) were not restrained, which might lead to damage of the aircraft in case of rapid acceleration / deceleration. In other cases, barrier nets were either not installed or in poor condition. Cargo containers and pallets were in poor condition.

D.2 DANGEROUS GOODS

Certain types of material need special care and treatment because they are flammable, toxic, poisonous, etc. These are commonly referred to as "Dangerous Goods". When properly packed, stored, labelled, protected etc., Dangerous Goods may be transported. Findings that have been recorded included improper storage and labelling of the Dangerous Goods carried onboard, unavailability of the required documents and manuals (Emergency Response Guide) and missing authorisation for the transportation of Dangerous Goods.

D.3 GENERAL CONDITION OF CARGO COMPARTMENT

Findings related to the general condition of the cargo compartment, such as damage to panels, deficiencies with the locking system, improper repairs of panels, and missing separation nets.

8. ACTION TAKEN

8.1 GENERAL

Based on the category, number and nature of the findings, several actions may be taken.

If the findings indicate that the safety of the aircraft and its occupants is impaired, corrective actions will be required. Normally the aircraft commander will be asked to address the serious deficiencies which are brought to his attention. In rare cases, where inspectors have reason to believe that the aircraft commander does not intend to take the necessary measures on the deficiencies reported to him, they will formally ground the aircraft. The formal act of grounding by the State of Inspection means that the aircraft is banned from further flights until appropriate corrective measures are taken.

In 2003, the following examples of events led to the grounding of aircraft: aircraft not TCAS¹ equipped, first officer without valid license for the aircraft type, no NAV charts onboard, aircraft not in compliance with maintenance schedule and Airworthiness Directives, missing Flight Manual and Certificate of Registration onboard, "deferred defects" not recorded in technical logbook, and not deferred in accordance with the Minimum Equipment List (MEL), technical condition of aircraft, Certificate of Airworthiness (CoA) out of date, no Ground Proximity Warning System (GPWS) installed, damage to aircraft exterior, severe leakage, cargo not properly secured, tyres worn beyond limits etc.

Another type of action is called "corrective actions before flight authorised". Before the aircraft is allowed to resume its flight, corrective action is required to rectify any deficiencies which have been identified.

In other cases, the aircraft may depart under operational restrictions. An example of such a restriction would be the case where there is a deficiency regarding passenger seats. Operation of the aircraft is possible under the condition that the deficient seats are not occupied by any passengers.

It is standard practice that the aircraft commander of the aircraft which has just been inspected is debriefed about the findings. In addition, Category 2 and Category 3 findings are communicated to the responsible Aviation Authority and the home base of the operator with the request to take appropriate action to prevent recurrence.

In some cases, when the findings on an aircraft are considered important, individual Member States may decide to revoke the entry permit of that aircraft. This means that the particular aircraft is no longer allowed to land at airports or fly in the airspace of that State. Such a ban can be lifted if the operator of the aircraft proves that the problems have been properly corrected. Such entry permit repercussions can therefore be, and usually are, of a temporary character.

¹ Traffic Alert and Collision Avoidance System

The table below lists the actions taken as a result of inspections performed in the years 2000-2003.

		YEAR				
		2000	2001	2002	2003	TOTAL
No. OF INSPECTIONS		2,394	2,706	3,234	3,414	11,748
No. OF FINDINGS		2,587	2,868	3,064	3,242	11,761
ACTIONS TAKEN	INFORMATION TO THE AUTHORITY AND OPERATOR	150	262	289	360	1,061
	RESTRICTION ON THE AIRCRAFT OPERATION	0	2	17	23	42
	CORRECTIVE ACTIONS BEFORE FLIGHT AUTHORISATION	184	210	225	321	940
	AIRCRAFT GROUNDED	16	28	12	20	76
	ENTRY PERMIT REPERCUSSIONS	9	4	6	7	26

8.2 INTEGRATION OF THE PROGRAMME IN THE OVERALL AVIATION SAFETY CHAIN

Based on the SAFA inspections performed over the last few years, experience shows that these give a general indication of the safety of foreign operators. This indication is limited in the sense that no full picture is obtained about the safety of that particular aircraft or operator. This is due to the fact that certain aspects are difficult to assess during an inspection (e.g. Crew Resource Management), the limited time available to perform an inspection, and the limited depth of inspection.

A full assessment of a particular aircraft or operator can only be obtained through the continuous oversight by the responsible Aviation Authority.

However, the information gained through the SAFA Programme is useful and the inspections contribute to the safe operation of the particular aircraft which has been inspected. SAFA also provides the opportunity for the Aviation Authorities of the Inspecting State and of the State of the Operator to co-operate in resolving specific safety-related problems. The SAFA Programme has its place in the safety chain and therefore provides a valuable contribution to aviation safety in general.

The central database is particularly useful as it contributes to a rapid flow of information to the States participating in the SAFA Programme. Information from all inspections performed is shared, thus contributing to a more complete picture about a certain aircraft, aircraft type or operator.

8.3 FUTURE ACTION

Future action will include, first and foremost, continued efforts towards greater uniformity of implementation of SAFA activities by participating States. This work will be carried out at a faster pace in the light of recent events.

Other actions contemplated relate to training, database developments, efforts to increase participation by Member States and co-operation with other organisations.

With regard to the training of inspectors, the Inspector Exchange Programme will be developed further to be an effective tool for practical training and harmonisation efforts.

Although ECAC Member States widely participate in the Programme, new initiatives will be developed to further broaden the base of participation.

Connection to the central SAFA database will be further promoted. This will be achieved by adapting the database to an access via a (secure) Internet connection.

The database will be further enhanced with regard to features assisting the inspector when preparing an inspection, analytical tools, alerting levels etc.

The inspection checklist will be amended to include additional inspection items. These will stem from new regulations coming into force and most probably will be in the field of operational equipment to be carried in the Flight Deck.

The database will be accessible to other parties involved in the SAFA Programme, such as the European Commission and the ICAO Safety Oversight Audit Section. It is also envisaged that limited data access will be given to non-ECAC States on the basis of agreements covering the bilateral exchange of safety data. Such access will be provided to the Federal Aviation Administration (FAA) of the USA and the State Civil Aviation Authority of the Russian Federation (SCAAR).

8.4 Co-OPERATION WITH ICAO

Co-operation with ICAO has been pursued, as illustrated by the provision of a lecturer to the SAFA training courses, and by the sharing of information.

8.5 Co-OPERATION WITH THE EUROPEAN UNION

The European Commission has proposed to the European Union Council and to the European Parliament a "Directive on the safety of third countries aircraft using Community airports". Early 2004, this Directive was finalised by the European Parliament and the Council. The Directive provides a legal basis for the performance of ramp checks on aircraft by EU Member States. Although there are many common elements between the SAFA Programme and the Directive, there are also some important differences. During the implementation period of two years, there will be close co-operation with the European Commission to assess the impact of the Directive on the SAFA Programme. Its adjustment may be needed in order to allow EU Member States, through their participation in the SAFA Programme, to meet their EU obligations.

The operational elements of the SAFA Programme are implemented by the Central JAA on behalf of ECAC. With the establishment of the European Aviation Safety Agency (EASA), the majority of activities of Central JAA will be transferred to EASA, and the JAA Headquarters will be downsized. Consideration is being given to best-suited arrangements required for the continuation of the SAFA Programme, including its database, on a pan-European scale.

APPENDIX A

LIST OF STATES OF INSPECTED OPERATORS

OPERATOR STATE	ICAO CODE	OPERATOR STATE	ICAO CODE
Afghanistan	OA	Dominican Republic	MD
Albania	LA	Ecuador	SE
Algeria	DA	Egypt	HE
Angola	FN	Equatorial Guinea	FG
Antigua and Barbuda	TA	Eritrea	HH
Argentina	SA	Estonia	EE
Armenia	U5	Ethiopia	HA
Aruba	T2	Finland	EF
Australia	Y	France	LF
Austria	LO	Gabon	FO
Azerbaijan	UB	Gambia	GB
Bahrain	OB	Georgia	UG
Bangladesh	VG	Germany	ED
Barbados	TB	Ghana	DG
Belarus	UM	Greece	LG
Belgium	EB	Hong Kong (China)	VH
Bosnia and Herzegovina	LQ	Hungary	LH
Brazil	SB	Iceland	BI
Brunei Darussalam	WB	India	VA
Bulgaria	LB	Indonesia	WA
Cabo Verde (Cape Verde)	GV	Iran	OI
Canada	C	Ireland	EI
Cayman Islands	MW	Israel	LL
Central African Republic	FE	Italy	LI
Chile	SC	Jamaica	MK
China	ZB	Japan	RJ
Colombia	SK	Jordan	OJ
Croatia	LD	Kazakhstan	UA
Cuba	MU	Kenya	HK
Cyprus	LC	Korea (North)	ZK
Czech Republic	LK	Korea (South)	RK
Democratic Rep. of the Congo	FZ	Kuwait	OK
Denmark	EK	Kyrgyzstan	U2

OPERATOR STATE	ICAO CODE	OPERATOR STATE	ICAO CODE
Lao People's Democratic Republic	VL	Sao Tome and Principe	FP
Latvia	EV	Saudi Arabia	OE
Lebanon	OL	Senegal	GO
Libyan Arab Jamahiriya (Libya)	HL	Seychelles	FS
Lithuania	EY	Sierra Leone	GF
Luxembourg	EL	Singapore	WS
The former Yugoslav Republic of Macedonia	LW	Slovakia	LZ
Madagascar	FM	Slovenia	LJ
Malaysia	WM	South Africa	FA
Malta	LM	Spain	LE
Mauritania	GQ	Sri Lanka	VC
Mauritius	FI	Sudan	HS
Mexico	MM	Swaziland	FD
Republic of Moldova	LU	Sweden	ES
Monaco	LN	Switzerland	LS
Mongolia	ZM	Syrian Arab Republic (Syria)	OS
Morocco	GM	Tadjikistan	UT
Namibia	FY	Taiwan (China)	RC
Netherlands	EH	Thailand	VT
Netherlands Antilles	TN	Tunesia	DT
New Zealand	NZ	Turkey	LT
Nigeria	DN	Turkmenistan	U3
Norway	EN	Uganda	HU
Oman	OO	Ukraine	UK
Pakistan	OP	United Arab Emirates	OM
Poland	EP	United Kingdom	EG
Portugal	LP	United States of America	K
Qatar	OT	Uzbekistan	U4
Romania	LR	Venezuela	SV
Russian Federation	U	Viet Nam	VV
Rwanda	HR	Yemen	OY
Saint Vincent / Grenadines	TV	Yugoslavia	LY
Samoa	NS		

APPENDIX B

AIRCRAFT TYPES INSPECTED

Aircraft Type	ICAO Code	Aircraft Type	ICAO Code
Antonov An-124 Ruslan	A124	BAe146-300	B463
Airbus A-300B4-600	A306	Boeing 707-300	B703
Airbus A-300B2/4-1/2/100/200, A-300C4-200	A30B	Boeing 717-200	B712
Airbus A-310 (CC-150 Polaris)	A310	Boeing 720	B720
Airbus A-319	A319	Boeing 727-100	B721
Airbus A-320	A320	Boeing 727-200	B722
Airbus A-321	A321	Boeing 737-100	B731
Airbus A330-200	A332	Boeing 737-200	B732
Airbus A330-300	A333	Boeing 737-300	B733
Airbus A340-200	A342	Boeing 737-400	B734
Airbus A340-300	A343	Boeing 737-500	B735
Airbus A340-600	A346	Boeing 737-600	B736
Hawker Siddeley HS-748, BAe-748	A748	Boeing 737-700, BBJ	B737
Commander 500	AC50	Boeing 737-800	B738
Antonov An-12	AN12	Boeing 747-100	B741
Antonov An-22 Antheus	A22	Boeing 747-200	B742
Antonov An-24	AN24	Boeing 747-300	B743
Antonov An-26	AN26	Boeing 747-400	B744
Antonov AN-32	AN32	Boeing 747SR	B74R
Antonov AN-72/74	AN72	Boeing 747SP	B74S
Eurocopter AS-350/550 Ecureuil	AS50	Boeing 757-200	B752
ATR-42-200/300/320	AT43	Boeing 757-300	B753
ATR-42-400	AT44	Boeing 767-200	B762
ATR-42-500	AT45	Boeing 767-300	B763
ATR-72	AT72	Boeing 767-400	B764
BAe ATP	ATP	Boeing 777-200	B772
Beech 1900	B190	Boeing 777-300	B773
Beech B300 Super King Air 350	B350	BAC-111 One-Eleven	BA11
BAe146-100, Statesman	B461	Beech 200,1300 Super King Air	BE20
BAe146-200, Quiet Trader, Statesman	B462	Beech 300	BE30

Aircraft Type	ICAO Code	Aircraft Type	ICAO Code
Beech 35	BE35	DHC-8-300 Dash 8	DH8C
Beriev A-40 Albatros	BE40	DHC-8-400 Dash 8	DH8D
Beech 90	BE9L	DHC-6 Twin Otter	DHC6
Fairey BN-2A/B Islander	BN2P	DHC-7 Dash 7	DHC7
Lockheed C-130, AC-130, etc	C130	Embraer EMB-110/ 111Bandeirante	E110
Cessna 172, P172, R172, Skyhawk	C172	Embraer EMB-120 Brasilia	E120
Cessna 182	C182	Embraer EMB-121 Xingu	E121
Cessna 208 Caravan	C208	Embraer ERJ-135	E135
Cessna T303 Crusader	C303	Embraer EMB-145, ERJ-145	E145
Cessna 310	C310	Fokker 100	F100
Cessna 401,402	C402	Fokker F-27 Friendship	F27
Cessna 421, Golden Eagle	C421	Fokker F-28 Fellowship	F28
Cessna 441 Conquest, Conquest 2	C441	Dassault Falcon 2000	F2TH
Cessna 500 Citation, Citation 1	C500	Fokker 50, Maritime Enforcer	F50
Cessna 525 CitationJet	C525	Fokker 70	F70
Cessna 550, 551	C550	Dassault Falcon-Mystère 900	F900
Cessna 560 Citation 5	C560	Dassault Falcon-Mystère 10/100	FA10
Cessna 650 Citation 3/6/7	C650	Dassault Falcon-Mystère 20/200	FA20
Cessna 750 Citation 10	C750	Dassault Falcon-Mystère 50	FA50
Canadair CL-44-O Guppy	CL4G	Soko G-4	G4
Canadair CL-600 Challenger	CL60	Bombardier BD-700 Global Express	GLEX
Canadair RJ-100 Regional Jet	CRJ1	Gulfstream Aerospace, Gulfstream 4	GLF4
Canadair RJ-200 Regional Jet	CRJ2	Gulfstream G-1159 3/4/5	GULF
Canadair RJ-700 Regional Jet	CRJ7	HS-125-1/2/3/400/600	H25A
Dornier 328	D328	HS-125-700	H25B
DC-10	DC10	BAe-125-1000	H25C
DC-2	DC2	Ilyushin Il-18/20/22/24	IL18
DC-6	DC6	Ilyushin Il-62	IL62
Douglas DC-8-50, Jet Trader (EC-24)	DC85	Ilyushin Il-76/78, Gajara	IL76
Douglas DC-8-60	DC86	Ilyushin Il-86	IL86
Douglas DC-9-30	DC93	Ilyushin Il-96	IL96
Douglas DC-9-40	DC94	Fairchild Dornier 328JET, Envoy 3	J328
DHC-8-100 Dash 8	DH8A	BAe-3100 Jetstream 31	JS31

Aircraft Type	ICAO Code	Aircraft Type	ICAO Code
BAe-4100 Jetstream 41	JS41	SN-601 Corvette	S601
Lockheed L-1011 TriStar	L101	Sikorsky S-76, H-76, AUH-76	S76
Lockheed Electra 1188	L188	Saab 2000	SB20
Lockheed L-1329 JetStar2/731	L29B	SAAB SF-340	SF34
Ted Smith Aerostar	L2P	Short 360	SH36
Let L-410/420 Turbolet	L410	Swearingen SA-26 Merlin 2	SW2
Learjet 31	LJ31	Fairchild SA-226TB, SA-227TT	SW3
Learjet 35, 36	LJ35	Fairchild SA-226TC, SA-227AC/AT	SW4
Learjet 45	LJ45	Tupolev Tu-134	T134
Learjet 55	LJ55	Tupolev Tu-154	T154
Learjet 60	LJ60	Tupolev Tu-204/214/224/234	T204
MOONEY M-20K/M	M20T	Socata TBM-700	TBM7
MD-11	MD11	BN-2A Mk3 Trislander	TRIS
MD-81	MD81	IAI 1124 Westwind, Sea Scan	WW24
MD-82	MD82	Yak-40	YK40
MD-83	MD83	Yak-42/142	YK42
MD-87	MD87		
MD-88	MD88		
MD-90	MD90		
Piaggio P-180 Avanti	P180		
Piper PA-23-150/160 Apache	PA23		
Piper PA-31/31P Navajo	PA31		
Piper PA-34 Seneca	PA34		
Piper PA-42 Cheyenne 3/400	PA42		
Piper PA-46 Malibu	PA46		
Pilatus PC-12	PC12		
BAe RJ-100	RJ1H		
BAe RJ-70	RJ70		
BAe RJ-85	RJ85		
Caravelle SE-210	S210		

APPENDIX C

OPERATORS INSPECTED

Operator	ICAO Code	Operator	ICAO Code
ABA AIR	ABP	AIR ARMENIA	ARR
ABELAG AVIATION	AAB	AIR ASTANA	KZR
ACH HAMBURG GMBH	7AC	AIR ATLANTIQUE	AAG
ACM AIR CHARTER GMBH	BVR	AIR ATLAS EXPRESS	AXP
ADRIA AIRWAYS	ADR	AIR BALTIC CORPORATION SIA	BTI
AEGEAN AVIATION	AEE	AIR BERLIN, INC.	BER
AER ARANN TEORANTA	REA	AIR BOSNA	BON
AER LINGUS TEORANTA	EIN	AIR BOTNIA	KFB
AERIAL (SCANWINGS) OY	ABF	AIR CAIRO	MSC
AERO LLOYD FLUGREISEN GMBH	AEF	AIR CANADA	ACA
AERO-CHARTER UKRAINE LTD	UCR	AIR CHINA	CCA
AEROCOM	MCC	AIR COMET	MPD
AERODIENST GMBH, NURNBURG	ADN	AIR CONTRACTORS (IRELAND) LTD	ABR
AREODYNAMICS MALAGA, S.L.	DNC	AIR DOLOMITI	DLA
AEROFLOT - RUSSIAN INT. AIRL.	AFL	AIR ENTERPRISE PULKOVO	PLK
AEROFLOT DON/DONAVIA	DNV	AIR EUROPA	AEA
AEROFREIGHT AIRLINES	FRT	AIR EUROPE SPA	AEL
AEROLINEAS ARGENTINAS	ARG	AIR EXEL NETHERLANDS B.V.	AXL
AERONOVA	OVA	AIR FRANCE	AFR
AEROVIAS DE MEXICO, S.A. DE CV	AMX	AIR GHANA	GHN
AEROWEST BRAUNSCHWEIG	7AW	AIR GLACIERS SA	AGV
AFRICA LINES	7AL	AIR GREENLAND A/S	GRL
AFRICAN AIRLINES CORPORATION	AAW	AIR HOLLAND LEASING III B.V.	HLN
AFRICAN INT. AIRWAYS	AIN	AIR INDEPENDENCE LUFT.	JTV
AFRICAN SAFARI AIRWAYS LTD	QSC	AIR INDIA	AIC
AFRIQUE CARGO SERVICE SENEGAL	NFS	AIR JAMAICA	AJM
AGUILA DEL SUR	7AD	AIR KAZAKSTAN	KZK
AIGLE AZUR	AAF	AIR KORYO	KOR
AIR 2000 LTD	AMM	AIR LEONE COMPANY LTD	RLL
AIR ADRIATIC	AHR	AIR LIETUVA	KLA
AIR ALGERIE	DAH	AIR LITTORAL	LIT
AIR ALPS AVIATION GMBH	LPV	AIR LUXOR, LDA	LXR
AIR ALSIE A/S	MMD	AIR MADAGASCAR	MDG
AIR ANATOLIA (ANADOLU HAVA.)	NTL	AIR MALTA PLC	AMC

Operator	ICAO Code	Operator	ICAO Code
AIR MARRAKECH SERVICE	7AM	ALL NIPPON AIRWAYS CO., LTD	ANA
AIR MAURITANIE	MRT	ALLCANADA EXPRESS LTD	CNX
AIR MAURITIUS LTD	MAU	AMERER AIR	AMK
AIR MEDICAL LTD	MCD	AMERICAN AIRLINES INC.	AAL
AIR MEDITERRANEE	BIE	AMERIJET INT.	AJT
AIR MEMPHIS	MHS	AMIRI FLIGHT	AUH
AIR MOLDOVA	MLD	AMR AMERICAN EAGLE, INC.	EGF
AIR MOLDOVA INT.	MLV	ANTONOV DESIGN BUREAU	ADB
AIR NEW ZEALAND LTD	ANZ	APATAS	LYT
AIR NOSTRUM	ANS	ARAVCO LTD	ARV
AIR ONE	ADH	ARCHANGELSK AIRLINES	AUL
AIR SENEGAL INT.	SNG	ARIANA AFGHAN AIRLINES	AFG
AIR SEYCHELLES	SEY	ARKIA ISRAEL INLAND AIRLINES	AIZ
AIR SLOVAKIA BWJ LTD	SVK	ARMAVIA	RNV
AIR TRAFFIC GMBH DUSSELDORF	ATJ	ARMENIAN INT. AIRLINES	RME
AIR TRANSAT	TSC	ASIANA AIRLINES	AAR
AIR UKRAINE	UKR	ASOV-AVIA, AIRCOMPANY	AZV
AIR UNIVERSAL LTD	UVS	ASTRAEUS LTD	AEU
AIR VIA	VIM	ATA-AEROCONDOR TRANSPORTES	ARD
AIR WALES LTD	AWW	ATLANT-SOYUZ	AYZ
AIR ZENA	TGZ	ATLANTA	ABD
AIRAILES	EOL	ATLANTIC AIRWAYS FAROE ISLANDS	FLI
AIRCRAFT MAINTENANCE COMPANY	AMV	ATLANTIC AVIATION FLIGHT SERVICE	7AF
AIRFREIGHT EXPRESS LTD	AFX	ATLAS AIR SERVICE	7AG
AIRLINES 400, JSC	VAZ	ATLAS AIR, INC. (JAMAICA, NY)	GTI
AIRLINK LUFTVERKEHRS GESELL.	JAR	ATLAS INT. (TURKEY)	OGE
AIRLONG CHARTER	7LC	ATRAN-AVIATRANS CARGO AIRLINES	VAS
AIRNET 21 JSC	DDD	AUDELI AIR EXPRESS	ADI
AIRVENTURE, BVBD	RVE	AUGSBURG-AIRWAYS GMBH	AUB
ALADA EMPRESA TRANSP. AEREOS	RAD	AUGUSTA AIR LUFTFAHRTUNTERNEHMEN	AUF
ALBANIAN AIRLINES MAK S.H.P.K.	LBC	AURELA	LSK
ALIPARMA	PAJ	AURIGNY AIR SERVICES LTD	AUR
ALISEA AIRLINES	BBG	AUSTRIAN AIRLINES (AUA)	AUA
ALITALIA	AZA	AUSTRIAN AIRTRANSPORT	AAT
ALITALIA EXPRESS	SMX	AVANTI AIR GMBH, BUDINGEN	EEX
ALIVEN	LVN	AVANTI AVIATION AACHEN LUFTG.	CLU

Operator	ICAO Code	Operator	ICAO Code
AVCON, AVIATION CONSULTING LTD	VCN	BRITISH EUROPEAN	BEE
AVIA EXPRESS LTD	AEH	BRITISH MIDLAND AIRWAYS LTD	BMA
AVIACION COMERCIAL DE AMERICA	VME	BRITISH MIDLAND REGIONAL LTD	BMI
AVIAENERGO	ERG	BRITTANNIA AB	BLX
AVIATION AMOS M. ET J. INC.	AMJ	BRUSSELS INT. AIRLINES	BXI
AVIATION BEAUPORT LTD	AVB	BUDAPEST AIR SERVICE LTD	BPS
AVIAVILSA	LVR	BULGARIA AIR	LZB
AVIOGENEX	AGX	BULGARIAN AIR CHARTER	BUC
AVIONES DE ORIENTE, C.A.	ROI	C N AIR, S.A.	ORO
AVJET CORPORATION	7AV	CABI	CBI
AXIS AIRWAYS	AXY	CAIRO AIR TRANSPORT COMPANY	CCE
AZALAVIA-AZERBAIJAN HAVA YOL.	AHY	CARGOLUX AIRLINES INT.	CLX
AZERBAIJAN HAVA JOLLARI	AHC	CARIB AVIATION LTD	DEL
AZZA TRANSPORT CO., LTD	AZZ	CARIBBEAN STAR AIRLINES LIM.	GFI
AZZURRA AIR	AZI	CARPATAIR S.A.	KRP
BA CITIEXPRESS	BRT	CAT AVIATION AG	CAZ
BAC EXPRESS AIRLINES LTD	RPX	CATHAY PACIFIC AIRWAYS LTD	CPA
BALKAN-BULGARIAN AIRLINES	LAZ	CEGA AVIATION LTD	CEG
BALTIC INT. AIRLINES	BIA	CENTRAL AIR EXPRESS	CAX
BANGLADESH BIMAN	BBC	CENTRE-AVIA AIRLINES, JSC	CVC
BELAVIA	BRU	CENTURY AVIATION INT.	HAI
BENAIR AS (NORWAY)	7BE	CHALLENGE AIR LUFTVERKEHRSG.	CLS
BH AIR	BGH	CHANNEL EXPRESS (AIR SERVICES)	EXS
BIN AIR GMBH	BID	CHINA AIRLINES	CAL
BLUE LINE	BLE	CHINA CARGO AIRLINES	CKK
BLUE PANORAMA AIRLINES SPA	BPA	CHINA EASTERN AIRLINES	CES
BLUEBIRD CARGO LTD	BBD	CIMBER AIR A/S	CIM
BONAIR BUSINESS CHARTER GMBH	BOB	CIRRUS LUFTFAHRTGESELL. MBH	RUS
BRAATHENS ASA	BRA	CITY AIRLINE AB	SDR
BRASAIR TRANSPORTES AEREOS	BSI	CITYFLYER EXPRESS	CFE
BRASMEX - BRASIL MINAS EXPRESS	BCA	CITYJET	BCY
BRIGHT AVIATION SERVICES	BRW	CITYLINE HUNGARY LTD	CNB
BRISTOL FLYING CENTRE	CLF	COMPAGNIE NATIONALE AIR GABON	AGN
BRITAIR S.A.	BZH	CONDOMETT	OND
BRITTANNIA AIRWAYS LTD	BAL	CONDOR FLUGDIENST GMBH	CFG
BRITISH AIRWAYS	BAW	CONFORT AIR INC.	COF

Operator	ICAO Code	Operator	ICAO Code
CONTINENTAL AIR LINES INC.	COA	ENIMEX LTD	ENI
COPTER ACTION OY	AAQ	ENKOR, JOINT STOCK COMPANY	ENK
CORPORATE AIR FLEET INC.	CTX	ERITREAN AIRLINES	ERT
CORSE AIR INT.	CRL	ESTONIAN AIR	ELL
CROATIA AIRLINES	CTN	ETHIOPIAN AIRLINES CORPORATION	ETH
CRONUS AIRLINES	CUS	EU AIRWAYS	EUY
CUBANA DE AVIACION S.A.	CUB	EURALAIR	ERL
CUKUROVA HAVACILIK	7CH	EURO CONTINENTAL AIE, S.L.	ECN
CYPRUS AIRWAYS LTD	CYP	EURO-ASIA AVIATION CO. LTD	8EA
CZECH AIRLINES J.S.C.	CSA	EUROATLANTIC AIRWAYS	MMZ
DAIRO AIR SERVICES,LTD	DSR	EUROCYPRIA AIRLINES LTD	ECA
DANISH AIR TRANSPORT	DTR	EUROFLY S.P.A.	EEZ
DARTA	DRT	EUROFLY SERVICE	EEU
DAS AIR CARGO	DAZ	EUROJET ITALIA	ERJ
DELTA AEROTAXI	DEA	EUROLOT S.A.	ELO
DELTA AIR LINES, INC.	DAL	EUROPE CONTINENTAL AIRWAYS ECA	ECC
DEUTSCHE BA	BAG	EUROPEAN AIR TRANSPORT	BCS
DEUTSCHE LUFTHANSA, A.G.	DLH	EUROPEAN AVIATION AIR CHARTER	EAF
DHL AIR LTD	DHK	EUROPEAN EXECUTIVE EXPRESS	EXC
DHL AIRWAYS, INC.	DHL	EUROWINGS AG, NURNBERG	EWG
DNIEPROAVIA	UDN	EUROWINGS FLUG GMBH, DORTMUND	EWf
DOMODEDOVO AIRLINES	DMO	EVA AIRWAYS CORPORATION	EVA
DSF FLUGDIENST	7DS	EVERGREEN INT. AIRL.	EIA
DUBAI AIRWING	DUB	EX. A.V. EXECUTIVE AVIATION	EEV
DUCAIR S.A.	DUK	EXCEL AVIATION LTD	XLA
DUCOR WORLD AIRLINES	DWA	EXCELLENT AIR GMBH	GZA
DUO AIRWAYS	DUO	EXECUJET SCANDINAVIA A/S	VMP
DUO AIRWAYS LTD	DAW	EXECUTIVE JET MANAGEMENT, INC.	EJM
DUTCH DAKOTA ASSOCIATION	7DD	EXIN	EXN
DUTCHBIRD	DBR	EXPRESS AIR, INC. (PHOENIX)	AAE
DYNAMIC AIR	DYE	FALCON AIR AB	FCN
EASTERN AIRWAYS (UK) LTD	EZE	FARNAIR NETHERLANDS B.V.	FRN
EASY JET SWITZERLAND SA	EZS	FARNER HUNGARY LTD	FAH
EASYJET AIRLINES CO. LTD	EZY	FARNER SWITZERLAND AG	FAT
EDELWEISS AIR AG	EDW	FEDERAL EXPRESS CORPORATION	FDX
EGYPT AIR	MSR	FINNAIR O/Y	FIN
EL AL - ISRAEL AIRLINES LTD	ELY	FLASH AIRLINES	FSH
ELBE AIR LUFTTRANSPORT	LBR	FLIGHTLINE	FLT
EMERALD AIRWAYS LTD	JEM	FLY AIR	FLM
EMIRATES	UAE	FLY JET	FJT
EMPRESA AEROCARIBBEAN S.A.	CRN	FLYING SERVICE	FYG
EMPRESA BRASILEIRA AERONAUTICA	EMB	FORMULA ONE MANAGEMENT LTD	FOR
EMPRESA DE AVIAC. AEROGAVIOTA	GTV	FOXAIR	FXR

Operator	ICAO Code	Operator	ICAO Code
FREE BIRD AIRLINES	FHY	HELIKOPTERJANST	7HJ
FUTURA	FUA	HELIOS AIRWAYS LTD	HCY
G5 EXECUTIVE AG	EXH	HELISECO	7HS
GAMA AVIATION LTD	GMA	HELLAS JET	HEJ
GAMBIA INT AIRLINES	GNR	HEMUS AIR	HMS
GANDALF	GNF	HMY AIRWAYS	HMY
GAZPROMAVIA	GZP	HOLA AIRLINES	HOA
GB AIRWAYS LTD	GBL	HONG KONG DRAGON AIRLINES	HDA
GEMINI AIR CARGO, LLC	GCO	IBERIA	IBE
GENEL HAVACILIK	7GH	IBERTRANS AEREA S.L.	IBT
GERMANIA FLUGGESELLSCHAFT KÖLN	GMI	IBERWORLD	IWD
GERMANWINGS GMBH	GWJ	ICELANDAIR	ICE
GESTAIR EXECUTIVE JET	GES	INTER EXPRESS AIRLINES	INX
GESTION AEREA AJECUTIVA S.L.	GJT	INTERFLIGHT	IFT
GHANA AIRWAYS CORPORATION	GHA	INTERFLY	RFL
GIO BUSINESS AVIATION	7GB	INTERJET (GREECE)	INJ
GLOBAL JET	7GJ	INTERSKY LUFTFAHRT GMBH	ISK
GLOBAL SUPPLY SYSTEMS LTD	GSS	IRAN NAT. AIRLINES (IRAN AIR)	IRA
GO FLY LTD	GOE	ISLANDSFLUG (ICEBIRD AIRLINE)	ICB
GOLD AIR INT. LTD	GDA	ITALY FIRST	IFS
GOLDECK FLUG GMBH	GDK	JAMAHIRIYA LIBYAN ARAB AIRL.	LAA
GOLDEN AIR FLYG AB	GAO	JAPAN AIR LINES COMPANY, LTD	JAL
GOLIAF AIR	GLE	JAT (JUGOSLOVENSKI AEROTR.)	JAT
GOVERNMENT CORPORATE EXECUTIVE	7CG	JDP LUX	JDP
GOVERNMENT OF CAYMAN ISLANDS	7CI	JET 2000	JTT
GROSSMANN AIR SERVICE	HTG	JET AVIATION, BUSINESS JETS AG	PJS
GST AERO, AIRCOMPANY	BMK	JET G&D AVIATION	JGD
GULF AIR	GFA	JET LINE INT. LTD	MJL
HAHN-AIRLINES GMBH	HHN	JET MANAGEMENT-EUROPE BV	7JM
HAMBURG INT LUFTV.	HHI	JETALLIANCE FLUGBETRIEBS AG	JAF
HANG KHONG VIET NAM	HVN	JETCLUB LTD	JCS
HAPAG LLOYD EXECUTIVE	HLX	JETLINE INC.	JLE
HAWAIIAN AIRLINES	HAL	JETMAGIC	JMG
HELI AIR SERVICES	HLR	JMC AIRLINES LTD	JMC
HELI-AIR-MONACO	MCM	JOHNSONS AIR LTD	JON

Operator	ICAO Code	Operator	ICAO Code
JORDAN AVIATION AIRCHARTER	JAV	MACEDONIAN AIRLINES (FYROM)	MAK
KALITTA AIR, LLC	CKS	MACEDONIAN AIRLINES (GREECE)	MCS
KARTHAGO AIRLINES	KAJ	MAERSK AIR I/S (DENMARK)	DAN
KAVMINVODYAVIA	MVD	MAERSK AIR LTD (UK)	MSK
KEENAIR CHARTER LTD	JFK	MAHAN AIR	IRM
KHALIFA AIRWAYS	KZW	MALAYSIAN AIRLINES SYSTEM	MAS
KHORS AIRCOMPANY	KHO	MALEV-HUNGARIAN AIRLINES	MAH
KIBRIS TURK HAVA YOLLARI LTD	KYV	MALEV EXPRESS	MEH
KINGFISHER AIR SERVICES	BEZ	MALMO AVIATION AB	SCW
KLM CITYHOPPER BV	KLC	MARINA AEROSERVICE S.A.	MAV
KLM ROYAL DUTCH AIRLINES	KLM	MARTINAIR HOLLAND N.V.	MPH
KLM UK LTD	UKA	MD AIRLINES LTD	MDI
KOGALYMAVIA	KGL	MERIDIANA SPA	ISS
KOMIINTERAVIA	KMV	METIS AVIATION CO	7MA
KOREAN AIR LINES CO., LTD	KAL	MIAMI AIR INT	BSK
KRASNOJARSKY AIRLINES	KJC	MIDDLE EAST AIRLINES	MEA
KUBAN AIRLINES	KIL	MIDWEST AIRLINES	MWA
KUWAIT AIRWAYS CORPORATION	KAC	MINERVA AIRLINES	MTC
KYRGYZSTAN AIRLINES	KGA	MINILINER SRL	MNL
L T E INT. AIRWAYS	LTE	MK AIRLINE LTD	MKA
LAN -LINEA AEREA NAC. DE CHILE	LAN	MNG HAVAYOLLARI VE TASIMACILIK	MNB
LATCHARTER	LTC	MONARCH AIRLINES LTD	MON
LAUDA AIR	LDA	MONDAIR	MMA
LINEAS AEREAS SURAMERICANAS	LAU	MONGOLIAN AIRLINES	MGL
LION AIR SERVICES INC.	WGT	MONTENEGRO AIRLINES	MGX
LIONS AIR AG	LEU	MOUNTAIN AIR CARGO, INC.	MTN
LITHUANIAN AIRLINES	LIL	MUSTIQUE AIRWAYS	MAW
LIVINGSTON S.P.A.	LVG	MYTRAVEL AIRWAYS (UK)	MYT
LONDON EXECUTIVE AVIATION LTD	LNK	MYTRAVEL AIRWAYS A.S.	VKG
LOT - POLSKIE LINIE LOTNICZE	LOT	NAMIB AIR (PTY) LTD	NMB
LOTUS AIRLINE	TAS	NATIONAL AIR SERVICE-NETJETS	7NJ
LTU LUFTRANSPORT-UNTERNEHMEN	LTU	NAVEGACION Y SERV. CANARIOS	NAY
LUFTHANSA CITYLINE	CLH	NEOS SPA	NOS
LUKOIL-AVIA	LUK	NETJETS AVIATION, INC.	EJA
LUXAIR	LGL	NETJETS, TRANSPORTES AEREOS	NJE
LUXAVIATION S.A.	LXA	NEW WORLD JET CORPORATION	NWD
LUXOR AIR	LXO	NIPPON CARGO AIRLINES CO.	NCA

Operator	ICAO Code	Operator	ICAO Code
NORD-FLYG AB	NEF	PROTEUS	PRB
NORDIC AIRLINK	NDC	PRT AVIATION S.L.	PRP
NORTH FLYING A/S	NFA	PSKOV STATE AVIATION ENT.	PSW
NORTHWEST AIRLINES INC.	NWA	QANTAS AIRWAYS LTD	QFA
NORWEGIAN AIR SHUTTLE AS	NAX	QATAR AIRWAYS COMPANY	QTR
NOUVEL AIR TUNISIE	LBT	QWESTAIR	QWA
NOVA AIRLINES AB	NVR	RAF-AVIA	MTL
NOVAIR-AVIACAO GERAL, S.A.	NOP	REDHILL AVIATION LTD	RHC
OCCITANIA JET FLEET	OJF	REGIONAL AIRLINES (FRANCE)	RGI
OCTAVIA AIRLINES	OCN	REGIONAL INT. AIR SERVICE	7RI
OLYMPIC AIRWAYS S.A.	OAL	REGIONAL, COMP. AERIENNE EURO.	RAE
OLYMPIC AVIATION S.A.	OLY	RIVNE UNIVERSAL AVIA	UNR
OMNI-AVIACAO E TECNOLOGIA	OAV	ROYAL AIR MAROC	RAM
OMNI AIR EXPRESS, INC. (TULSA)	OAE	ROYAL BRUNEI AIRLINES	RBA
ONUR HAVA TASIMACILIK AWMS	OHY	ROYAL JORDANIAN	RJA
OREX ORBIT EXPRESS	7OE	RUTAS AEREAS, C.A.	RUC
OSTFRIESISCHE LUFTRANSPORT	OLT	RYANAIR	RYR
OXAERO	OXE	SAFAIR PTY LTD	SFR
PAKISTAN INT. AIRLINES (PIA)	PIA	SARATOV AVIATION DIVISION	SOV
PANAIR	PNR	SATA INTERNACIONAL	RZO
PANAIR S.P.A.	PIT	SAUDI ARABIAN AIRLINES	SVA
PEGASUS HAVA TASIMACILIGI	PGT	SCANDINAVIAN AIRLINES SYSTEM	SAS
PODILIA-AVIA	PDA	SERVAIR, PRIVATE CHARTER AG	SWZ
POLAR AIR CARGO, INC.	PAC	SERVICIOS AEREOS PROFESIONALES	PSV
POLET	POT	SERVIZI AEREI SPA	SNM
POLYNESIAN AIRLINE OPERATIONS	PAO	SHANS AIR, JOINT STOCK COMPANY	SNF
POOL AVIATION	7PA	SHOROUK AIR	SHK
PORTUGALIA	PGA	SHOVKOVYI SHLYAH LTD	SWW
PREMIAIR AVIATION SERVICES LTD	PGL	SIA CARGO PTE LTD	SQC
PREMIUM AIR SHUTTLE LTD	EMI	SIBERIA AIRLINES	SBI
PRIVAT AIR SA	PTI	SIGNATURE AIRCRAFT CHARTER	SIG
PRIVATE FLIGHT	ZZZ	SILK WAY	AZQ
PRIVAT WINGS FLUGCHARTER	PWF	SILVER ARROWS S.A.	SVW
PRIVATE X-PRESS	PTX	SILVER CLOUD AIR	7SC

Operator	ICAO Code	Operator	ICAO Code
SINGAPORE AIRLINES LTD	SIA	TACV -TRANS. AEREOS CABO VERDE	TCV
SIRIO	SIO	TAG AVIATION S.A.	FPG
SIT SET	7SI	TAG CITY AIR	CIP
SIXCARGO S.P.A.	ISG	TAJIKAIR	TJK
SKORPION AIR	SPN	TAM - LINHAS AEREAS S.A.	TAM
SKY AIRLINES	SHY	TAME	TAE
SKY WIND	AZH	TANGO HOLDING	7TH
SKYBUS, INC. (DENVER, CO)	FLH	TAROM, ROMANIAN AIR TRANSPORT	ROT
SKYEUROPE AIRLINES, A.S.	ESK	TAUNUS AIR GMBH&CO.	TAQ
SKYLINE FLIGHTS GMBH	SLF	THAI AIRWAYS INT.	THA
SKYNET AIRLINES LTD	SIH	THOMAS COOK AIRLINES	TCX
SKYSERVICE F.B.O. INC.	SSV	TIME AIR	7TB
SKYWAYS EXPRESS AB	SKX	TITAN AIRWAYS LTD	AWC
SKYWORK SA	SRK	TNT AIRWAYS S.A.	TAY
SN BRUSSELS AIRLINES	DAT	TNT INT. AVIATION	NTR
SOBELAIR	SLR	TOP-FLY	TLY
SOUTH AFRICAN AIRWAYS (SAA)	SAA	TRANS ISLAND AIR	TRD
SOUTH AIRLINES	OTL	TRANSAERO AIRLINES	TSO
SPANAIR	JKK	TRANSAIR	7TA
SPEEDWINGS SA	SPW	TRANSAVIA HOLLAND B.V.	TRA
SRILANKAN AIRLINES	ALK	TRANSAVIAEXPORT	TXC
STAR AIR	STQ	TRANSPORTES AEREOS PORTUGUESES	TAP
STAR AIR I/S	SRR	TRAVEL AIR GMBH&CO. KG	TAX
STAR AIR LTD	SIM	TRAVEL SERVICE LTD (HUNGARY)	TVL
STAR EUROPE	SEU	TRAVEL SERVIS (CZECH REP.)	TVS
STATE TRANSPORT COMPANY RUSSIA	SDM	TRISTAR AIR	TSY
STERLING EUROPEAN AIRLINES A/S	SNB	TULIP AIR	TLP
STYRIAN AIRWAYS GMBH	STY	TULPAR	TUL
SUCKLING AIRWAYS	SAY	TUNIS AIR	TAR
SUDAN AIRWAYS	SUD	TURKISH AIRLINES-TURK HAVA YO.	THY
SUN-AIR OF SCANDINAVIA A/S	SUS	TURKMENHOVAYOLLARY	TUA
SUNDOR INT. AIR SERVICES	ERO	TWINJET AIRCRAFT LTD	TWJ
SUNEXPRESS -GUNES EKSPRES HAV.	SXS	TYROLEAN AIRWAYS	TYR
SVG AIR	1SV	TYROLEAN JET SERVICE	TJS
SWIFTAIR S.A.	SWT	TYUMEN AIRLINES	TYM
SWISS AIR-AMBULANCE LTD	SAZ	UKRAINE AIRALLIANCE	UKL
SWISS INT. AIR LINES	CRX	UKRAINE INT. AIRLINES	AUI
SYRIAN ARAB AIRLINES	SYR	UKRAINE MEDITERRANEAN AIRLINES	UKM
TAAG, LINHAS AEREAS DE ANGOLA	DTA	UNITED AIR LINES INC.	UAL

Operator	ICAO Code	Operator	ICAO Code
UNITED PARCEL SERVICE COMPANY	UPS	ZOREX S.A.	ORZ
UNIVERSAL AIRWAYS, INC.	UVA		
URAL AIRLINES	SVR		
US AIRWAYS	USA		
UTAR AVIATION, JSC	TMN		
UZBEKISTAN AIRWAYS-HAVO JUL.	UZB		
VAL AVIA	2VA		
VALAN LTD	VLN		
VARIG-VIACAO AEREA RIO-GRAND.	VRG		
VARIG LOGISTICA S.A.	VLO		
VEGA AIRLINES	VEA		
VENEZOLANA SERV EXPR DE CARGA	VEC		
VIKING AIRLINES AB	VIK		
VIM AVIA	MOV		
VIP AVIA	PAV		
VIRGIN BLUE	VOZ		
VIRGIN EXPRESS	VEX		
VISIG OPERACIONES AEREAS S.A.	VSG		
VLAAMSE	VLM		
VOLARE AIRLINES (ITALY)	VLE		
VOLARE AVIATION ENT. (UKRAINE)	VRE		
VOLGA-DNEPR	VDA		
WDL AVIATION (KOLN)	WDL		
WELCOME AIR LUFTFAHRT	WLC		
WEST AIR SWEDEN AB	SWN		
WEST-AIR.FR	FWA		
WESTAIR AVIATION LTD	EFF		
WIDEROE'S FLYVESELSKAP A/S	WIF		
WIND JET S.P.A.	JET		
XL AVIATION	1XL		
YAK-SERVICE	AKY		
YEMENIA, YEMEN AIRWAYS	IYE		
YES-LINHAS AEREAS CHARTER	YSS		
ZOOM AIRLINES INC.	OOM		

APPENDIX D

RESULTS OF INSPECTIONS PER INSPECTION ITEM

INSPECTION ITEM	DESCRIPTION	NO. INSPECTIONS (III)	NO. FINDINGS (F)	F/III
A. FLIGHT DECK / GENERAL	GENERAL CONDITION	2,161	43	0.019898
	EMERGENCY EXIT	1,905	7	0.003675
	EQUIPMENT	1,738	114	0.065593
DOCUMENTATION	MANUALS	1,622	75	0.046239
	CHECKLISTS	1,659	35	0.021097
	RADIO NAVIGATION CHARTS	1,737	122	0.070236
	MINIMUM EQUIPMENT LIST	1,609	98	0.060907
	CERTIFICATE OF REGISTRATION	2,798	29	0.010365
	NOISE CERTIFICATE (WHERE APPLICABLE)	2,721	38	0.013965
	AOC OR EQUIVALENT	2,588	58	0.022411
	RADIO LICENCE	2,776	48	0.017291
	CERTIFICATE OF AIRWORTHINESS	2,788	31	0.011119
FLIGHT DATA	FLIGHT PREPARATION	1,679	99	0.058964
	WEIGHT AND BALANCE SHEET	1,535	69	0.044951
SAFETY EQUIPMENT	HAND FIRE EXTINGUISHERS	1,757	44	0.025043
	LIFE JACKETS / FLOTATION DEVICES	1,597	39	0.024421
	HARNESS	1,753	53	0.030234
	OXYGEN EQUIPMENT	1,636	67	0.040954
	FLASH LIGHT	1,642	45	0.027406
FLIGHT CREW JOURNEY LOG BOOK / TECHNICAL LOG OR EQUIVALENT	FLIGHT CREW LICENCE	2,496	105	0.042067
	JOURNEY LOG BOOK, OR EQUIVALENT	2,179	36	0.016521
	MAINTENANCE RELEASE	2,191	32	0.014605
	DEFECT NOTIFICATION AND RECTIFICATION (INCL. TECH LOG)	2,064	84	0.040698
	PRE-FLIGHT INSPECTION	1,816	17	0.009361
B. SAFETY / CABIN	GENERAL INTERNAL CONDITION	1,847	88	0.047645
	CABIN ATTENDANT'S STATION AND CREW REST AREA	1,539	49	0.031839
	FIRST AID KIT / EMERGENCY MEDICAL KIT	1,442	73	0.050624
	HAND FIRE EXTINGUISHERS	1,481	43	0.029034
	LIFE JACKETS / FLOTATION DEVICES	1,402	44	0.031384
	SEAT BELTS	1,509	24	0.015905
	EMERGENCY EXIT, LIGHTING AND MARKING, TORCHES	1,447	135	0.093296
	SLIDES / LIFE-RAFTS (AS REQUIRED)	1,117	17	0.015219
	OXYGEN SUPPLY (CABIN CREW AND PASSENGERS)	1,363	50	0.036684
	SAFETY INSTRUCTIONS	1,432	63	0.043994
	CABIN CREW MEMBERS	1,364	6	0.004399
	ACCESS TO EMERGENCY EXITS	1,522	83	0.054534

INSPECTION ITEM	DESCRIPTION	NO. INSPECTIONS (III)	NO. FINDINGS (F)	F/III
	SAFETY OF PASSENGER BAGGAGE	901	20	0.022198
	SEAT CAPACITY	1,241	2	0.001612
C. AIRCRAFT CONDITION	GENERAL EXTERNAL CONDITION	2,970	272	0.091582
	DOORS AND HATCHES	2,720	30	0.011029
	FLIGHT CONTROLS	2,697	54	0.020022
	WHEELS, TYRES AND BRAKES	2,737	162	0.059189
	UNDERCARRIAGE	2,716	26	0.009573
	WHEEL WELL	2,648	33	0.012462
	POWERPLANT AND PYLON	2,611	61	0.023363
	FAN BLADES	2,279	19	0.008337
	PROPELLERS	496	10	0.020161
	OBVIOUS REPAIRS	2,286	22	0.009624
	OBVIOUS UNREPAIRED DAMAGE	2,240	40	0.017857
	LEAKAGE	2,375	124	0.052211
D. CARGO	GENERAL CONDITION OF CARGO COMPARTMENT	1,546	77	0.049806
	DANGEROUS GOODS	292	32	0.109589
	SAFETY OF CARGO ON BOARD	904	159	0.175885
E. GENERAL	GENERAL	443	36	0.081264

APPENDIX E

RESULTS OF INSPECTIONS PER INSPECTION ITEM PER YEAR

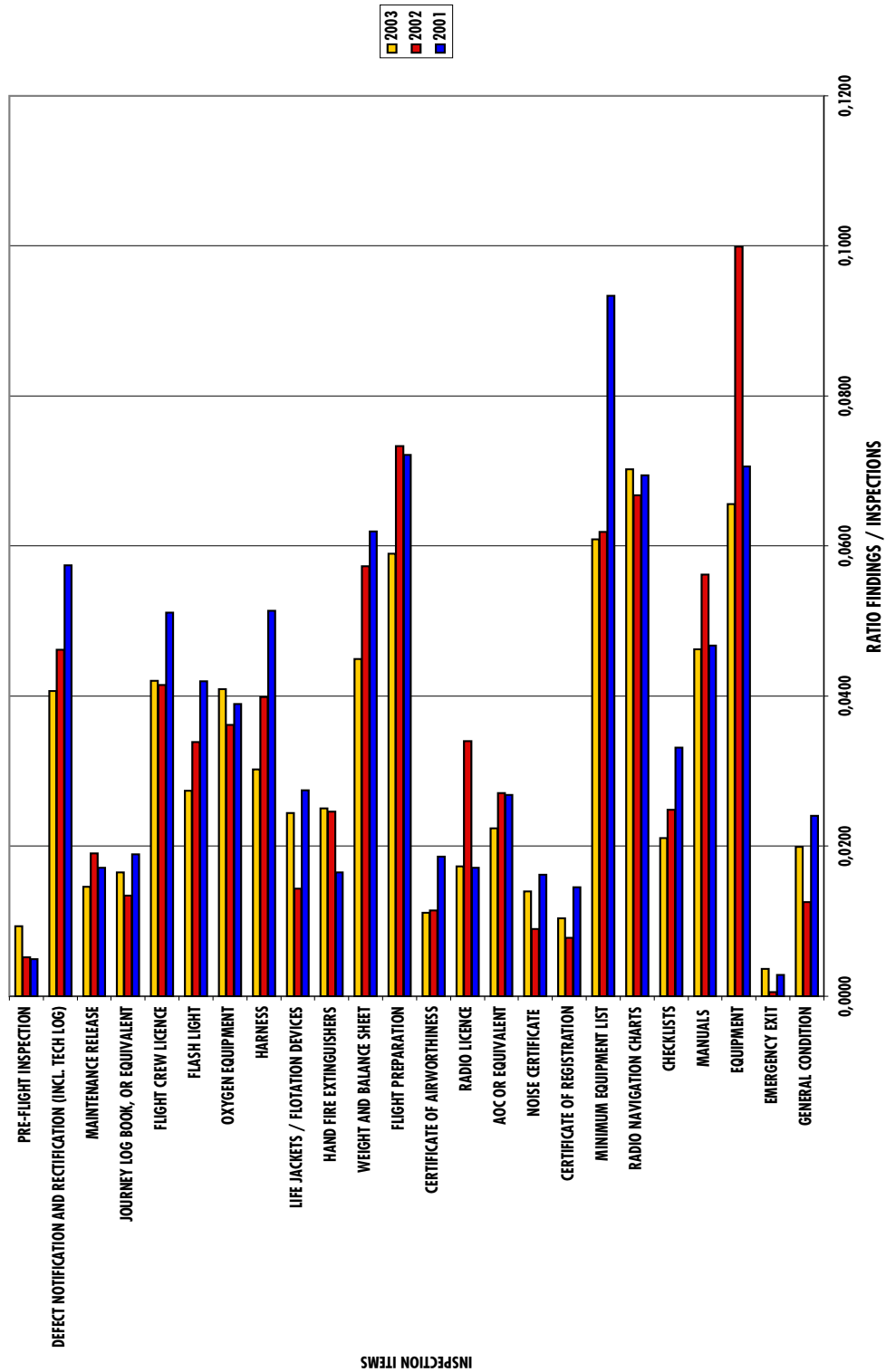
ITEM	DESCRIPTION	YEAR			
		2000	2001	2002	2003
		F/III ¹	F/III	F/III	F/III
A01	GENERAL CONDITION	0.0121	0.0241	0.0125	0.0199
A02	EMERGENCY EXIT	0.0006	0.0029	0.0005	0.0037
A03	EQUIPMENT	0.0667	0.0706	0.0999	0.0656
A04	MANUALS	0.0559	0.0467	0.0562	0.0462
A05	CHECKLISTS	0.0313	0.0331	0.0249	0.0211
A06	RADIO NAVIGATION CHARTS	0.0376	0.0695	0.0668	0.0702
A07	MINIMUM EQUIPMENT LIST	0.0690	0.0934	0.0619	0.0609
A08	CERTIFICATE OF REGISTRATION	0.0140	0.0145	0.0078	0.0104
A09	NOISE CERTIFICATE	0.0172	0.0162	0.0090	0.0140
A10	AOC OR EQUIVALENT	0.0363	0.0268	0.0271	0.0224
A11	RADIO LICENCE	0.0141	0.0171	0.0340	0.0173
A12	CERTIFICATE OF AIRWORTHINESS	0.0129	0.0186	0.0114	0.0111
A13	FLIGHT PREPERATION	0.0485	0.0721	0.0733	0.0590
A14	WEIGHT AND BALANCE SHEET	0.0543	0.0620	0.0573	0.0450
A15	HAND FIRE EXTINGUISHERS	0.0233	0.0165	0.0246	0.0250
A16	LIFE JACKETS / FLOTATION DEVICES	0.0227	0.0274	0.0144	0.0244
A17	HARNESS	0.0251	0.0514	0.0399	0.0302
A18	OXYGEN EQUIPMENT	0.0137	0.0389	0.0362	0.0410
A19	FLASH LIGHT	0.0421	0.0419	0.0339	0.0274
A20	FLIGHT CREW LICENCE	0.0537	0.0511	0.0415	0.0421
A21	JOURNEY LOG BOOK, OR EQUIVALENT	0.0124	0.0189	0.0134	0.0165
A22	MAINTENANCE RELEASE	0.0201	0.0171	0.0191	0.0146
A23	DEFECT NOTIFICATION & RECTIFICATION (INCL. TECH LOG)	0.0528	0.0574	0.0462	0.0407
A24	PRE-FLIGHT INSPECTION	0.0100	0.0050	0.0052	0.0094
B01	GENERAL INTERNAL CONDITION	0.0534	0.0456	0.0483	0.0476
B02	CABIN ATTENDANT'S STATION AND CREW REST AREA	0.0254	0.0295	0.0263	0.0318
B03	FIRST AID KIT / EMERGENCY MEDICAL KIT	0.0555	0.0547	0.0491	0.0506
B04	HAND FIRE EXTINGUISHERS	0.0242	0.0218	0.0197	0.0290
B05	LIFE JACKETS / FLOTATION DEVICES	0.0351	0.0360	0.0233	0.0314
B06	SEAT BELTS	0.0155	0.0101	0.0139	0.0159
B07	EMERGENCY EXIT, LIGHTING AND MARKING, TORCHES	0.0672	0.0850	0.0927	0.0933
B08	SLIDES / LIFE-RAFTS (AS REQUIRED)	0.0156	0.0187	0.0107	0.0152
B09	OXYGEN SUPPLY (CABIN CREW AND PASSENGERS)	0.0298	0.0263	0.0239	0.0367
B10	SAFETY INSTRUCTIONS	0.0305	0.0486	0.0381	0.0440
B11	CABIN CREW MEMBERS	0.0008	0.0035	0.0008	0.0044

		YEAR			
		2000	2001	2002	2003
ITEM	DESCRIPTION	F/III ¹	F/III	F/III	F/III
B12	ACCESS TO EMERGENCY EXITS	0.0325	0.0307	0.0370	0.0545
B13	SAFETY OF PASSENGER BAGGAGE	0.0266	0.0375	0.0311	0.0222
B14	SEAT CAPACITY	0.0017	0.0010	0.0008	0.0016
C01	GENERAL EXTERNAL CONDITION	0.1013	0.0752	0.0817	0.0916
C02	DOORS AND HATCHES	0.0158	0.0171	0.0143	0.0110
C03	FLIGHT CONTROLS	0.0160	0.0185	0.0189	0.0200
C04	WHEELS, TYRES AND BRAKES	0.0358	0.0390	0.0445	0.0592
C05	UNDERCARRIAGE	0.0183	0.0210	0.0171	0.0096
C06	WHEEL WELL	0.0137	0.0150	0.0108	0.0125
C07	POWERPLANT AND PYLON	0.0216	0.0245	0.0329	0.0234
C08	FAN BLADES	0.0101	0.0072	0.0038	0.0083
C09	PROPELLERS	0.0150	0.0065	0.0085	0.0202
C10	OBVIOUS REPAIRS	0.0145	0.0146	0.0154	0.0096
C11	OBVIOUS UNREPAIRED DAMAGE	0.0384	0.0435	0.0246	0.0179
C12	LEAKAGE	0.0615	0.0472	0.0459	0.0522
D01	GENERAL CONDITION OF CARGO COMPARTMENT	0.0435	0.0618	0.0631	0.0498
D02	DANGEROUS GOODS	0.0450	0.1107	0.0997	0.1096
D03	SAFETY OF CARGO ON BOARD	0.1345	0.1079	0.1737	0.1759
GEN	GENERAL	0.0820	0.0182	0.0576	0.0813

¹ FINDINGS PER INSPECTION

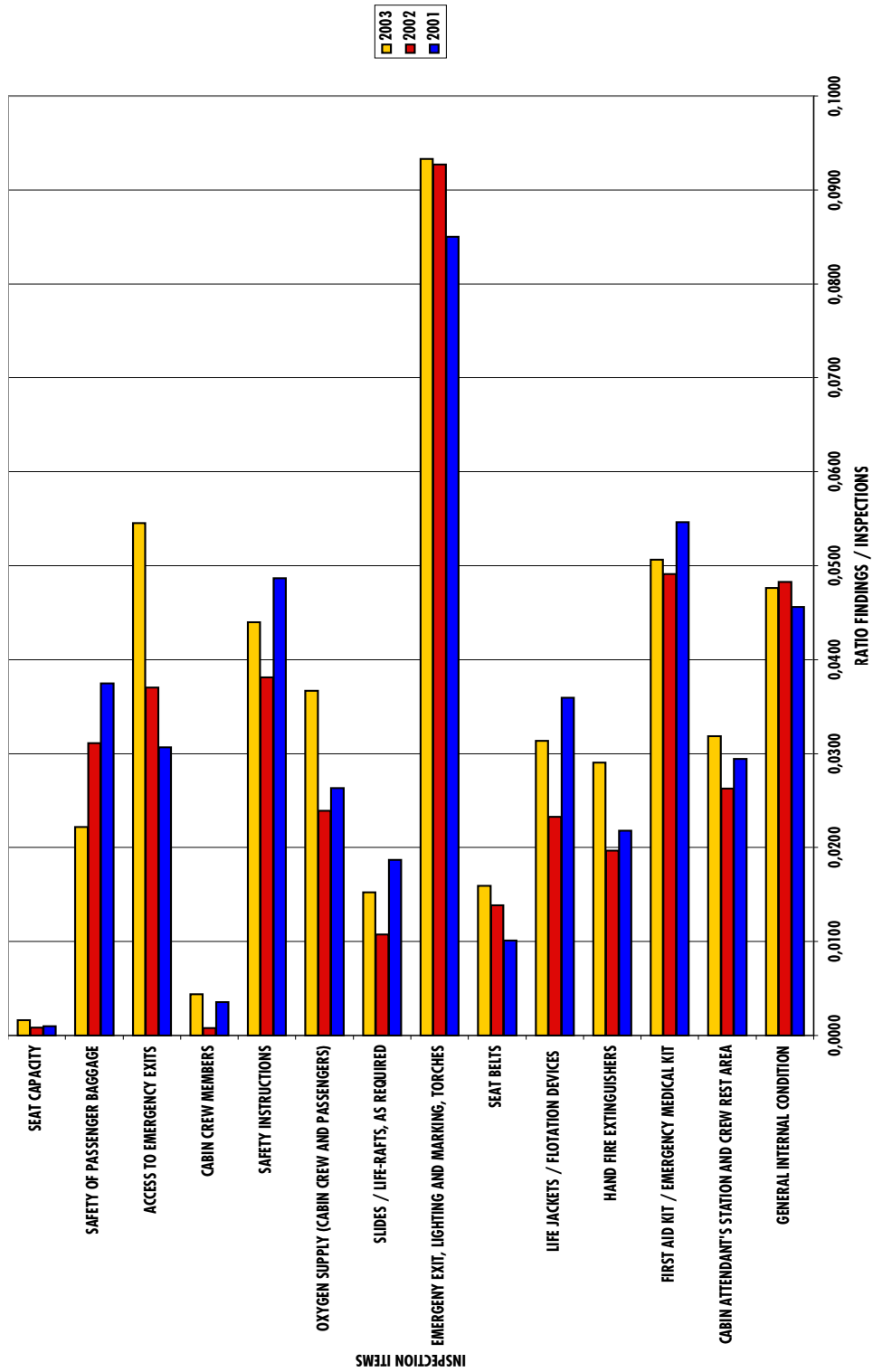
APPENDIX E-1 FLIGHT DECK

RATIO OF FINDINGS IN RELATION TO INSPECTIONS



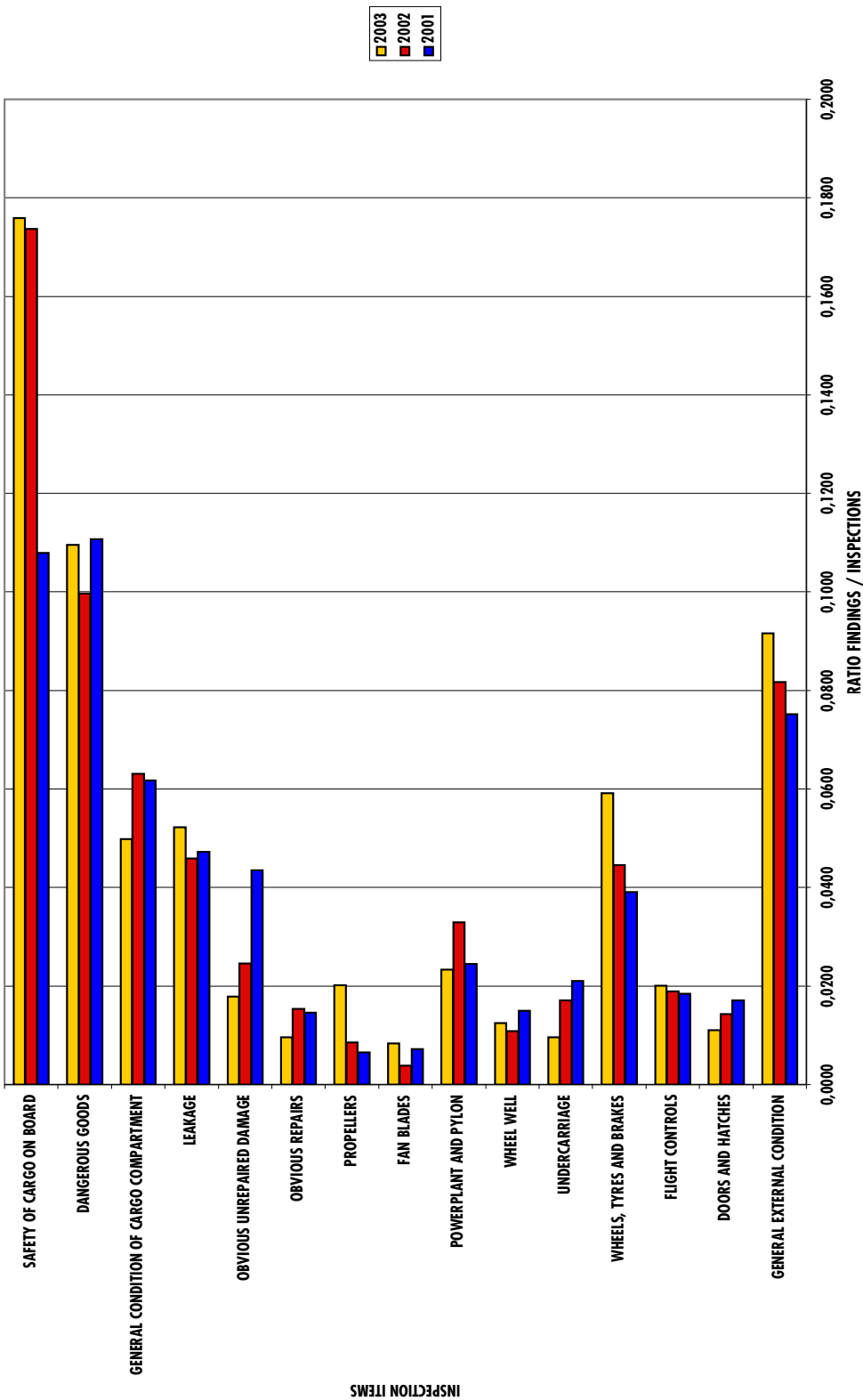
APPENDIX E-2 CABIN & SAFETY

RATIO OF FINDINGS IN RELATION TO INSPECTIONS



APPENDIX E-3 AIRCRAFT CONDITION & CARGO

RATIO OF FINDINGS IN RELATION TO INSPECTIONS



APPENDIX F

RESULTS OF INSPECTIONS PER INSPECTION ITEM

INSPECTION ITEM	DESCRIPTION	NO. INSPECTIONS (III)	FINDINGS (F)		
			CAT. 1	CAT. 2	CAT. 3
A. FLIGHT DECK / GENERAL	A01 GENERAL CONDITION	2,161	16	8	19
	A02 EMERGENCY EXIT	1,905	4	3	0
	A03 EQUIPMENT	1,738	12	92	10
DOCUMENTATION	A04 MANUALS	1,622	17	53	5
	A05 CHECKLISTS	1,659	14	16	5
	A06 RADIO NAVIGATION CHARTS	1,737	34	74	14
	A07 MINIMUM EQUIPMENT LIST	1,609	29	62	7
	A08 CERTIFICATE OF REGISTRATION	2,798	16	11	2
	A09 NOISE CERTIFICATE (WHERE APPLICABLE)	2,721	24	11	3
	A10 AOC OR EQUIVALENT	2,588	33	22	3
	A11 RADIO LICENCE	2,776	24	23	1
	A12 CERTIFICATE OF AIRWORTHINESS	2,788	10	15	6
	A13 FLIGHT PREPARATION	1,679	27	54	18
	A14 WEIGHT AND BALANCE SHEET	1,535	17	32	20
	A15 HAND FIRE EXTINGUISHERS	1,757	13	23	8
SAFETY EQUIPMENT	A16 LIFE JACKETS / FLOTATION DEVICES	1,597	13	15	11
	A17 HARNESS	1,753	15	32	6
	A18 OXYGEN EQUIPMENT	1,636	19	32	16
	A19 FLASH LIGHT	1,642	13	26	6
	A20 FLIGHT CREW LICENCE	2,496	32	32	41
	A21 JOURNEY LOG BOOK, OR EQUIVALENT	2,179	13	12	11
	A22 MAINTENANCE RELEASE	2,191	6	9	17
FLIGHT CREW JOURNEY LOG BOOK / TECHNICAL LOG OR EQUIVALENT	A23 DEFECT NOTIFICATION AND RECTIFICATION (INCL. TECH LOG)	2,064	37	37	10
	A24 PREFLIGHT INSPECTION	1,816	8	6	3
	B01 GENERAL INTERNAL CONDITION	1,847	37	29	22
	B02 CABIN ATTENDANT'S STATION AND CREW REST AREA	1,539	9	29	11
	B03 FIRST AID KIT / EMERGENCY MEDICAL KIT	1,442	28	37	8
B. SAFETY / CABIN	B04 HAND FIRE EXTINGUISHERS	1,481	14	20	9
	B05 LIFE JACKETS / FLOTATION DEVICES	1,402	14	21	9

INSPECTION ITEM	DESCRIPTION	NO. INSPECTIONS (III)	FINDINGS (F)			
			CAT. 1	CAT. 2	CAT. 3	TOTAL
C. AIRCRAFT CONDITION	B06 SEAT BELTS	1,509	10	11	3	24
	B07 EMERGENCY EXIT, LIGHTING AND MARKING, TORCHES	1,447	39	73	23	135
	B08 SLIDES / LIFE-RAFTS (AS REQUIRED)	1,117	6	8	3	17
	B09 OXYGEN SUPPLY (CABIN CREW AND PASSENGERS)	1,363	16	27	7	50
	B10 SAFETY INSTRUCTIONS	1,432	26	31	6	63
	B11 CABIN CREW MEMBERS	1,364	3	2	1	6
	B12 ACCESS TO EMERGENCY EXITS	1,522	18	37	28	83
	B13 SAFETY OF PASSENGER BAGGAGE	901	1	8	11	20
	B14 SEAT CAPACITY	1,241	0	0	2	2
	C01 GENERAL EXTERNAL CONDITION	2,970	182	81	9	272
	C02 DOORS AND HATCHES	2,720	7	20	3	30
	C03 FLIGHT CONTROLS	2,697	30	18	6	54
	C04 WHEELS, TYRES AND BRAKES	2,737	62	79	21	162
	C05 UNDERCARRIAGE	2,716	16	9	1	26
D. CARGO	C06 WHEEL WELL	2,648	22	8	3	33
	C07 POWERPLANT AND PYLON	2,611	38	22	1	61
	C08 FAN BLADES	2,279	10	7	2	19
	C09 PROPELLERS	496	7	3	0	10
	C10 OBVIOUS REPAIRS	2,286	14	8	0	22
	C11 OBVIOUS UNREPAIRED DAMAGE	2,240	16	20	4	40
	C12 LEAKAGE	2,375	65	46	13	124
	D01 GENERAL CONDITION OF CARGO COMPARTMENT	1,546	28	30	19	77
	D02 DANGEROUS GOODS	292	4	10	18	32
	D03 SAFETY OF CARGO ON BOARD	904	22	34	103	159
	E01 GENERAL	443	22	11	3	36

CATEGORY 1 = MINOR FINDING

CATEGORY 2 = SIGNIFICANT FINDING

CATEGORY 3 = MAJOR FINDING

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